

2012 Medical Director's Updates to BSPC

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County of San Diego

HEALTH AND HUMAN SERVICES AGENCY

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Medical Director's Update for Base Station Physicians' Committee January, 2012

Congratulations to Mary Murphy, RN, CSA-17 and Rancho Santa Fe Fire. Mary was awarded a Meritorious Service Medal by the California Emergency Medical Services Authority as part of their EMS Awards program. She was cited for "superior EMS coordination, education, and leadership in San Diego County" as nurse coordinator for the CSA.

Also recognized were Debbie Moore, RN, from Escondido who received an Inter-Service EMS Recognition. She was "instrumental in saving the life" of an eighth grader who collapsed in the school gym. **Physical education teacher Brian Hudson** from Escondido received a Civilian Award for suggesting the purchase of the AED.

Congratulations to Scripps Mercy on their new emergency department. They now have a beautiful spacious department with individual rooms and larger spaces. The emphasis on brief initial evaluation and rapid placement in an appropriate space for beginning stabilization and evaluation will continue. They have an in department CT. The Mercy base will have more space and an improved location. This is a wonderful addition to the EMS System.

Flu cases jumped the last two weeks. Most are influenza A. The first death from influenza in the state occurred last month, even before detected cases rose. Here in the County, ED visits for fever, GI illness, and respiratory illness all rose several weeks ago. It is not too late for influenza vaccination, which protects both EMS personnel and patients.

Pertussis cases continue although at a lower level. EMS personnel should receive a Tdap pertussis vaccine.

This year's capacity plan was distributed. The number of December transports rose, and patients bypassed went up. Please see the data charts below.

The midazolam shortage continues. Suppliers tell us they expect shipments by the end of January, although there is no guarantee. Remember to use unexpired midazolam for patient care if you have it available. Continue to keep supplies of recently expired medication, e.g. expiring December 31, 2011, for use when it is the only option.

Field units should make base contact early. Contact shortly before arrival makes it impossible for the base to evaluate the patient's needs, and denies the receiving hospital time to make room for, and prepare for, the patient.

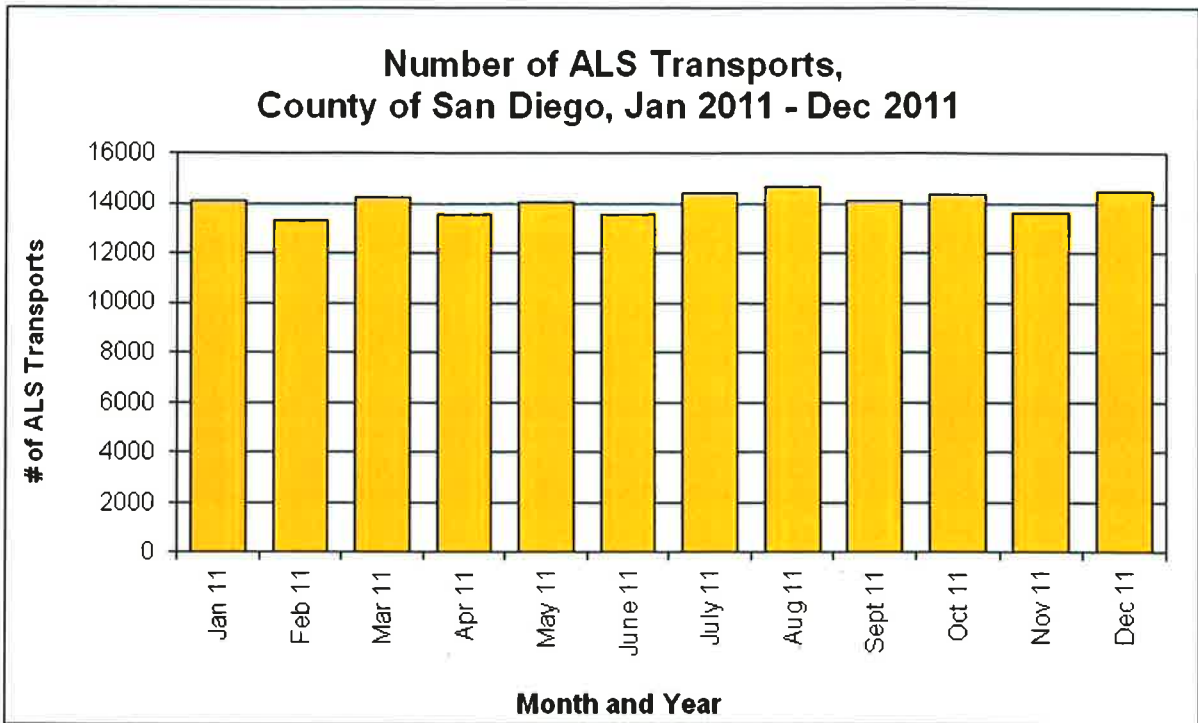
Field units please supply the base your agency number and four-digit unit numbers. This is important to facilitate the PCR upload/matching process for data collection. Accurate data helps the system.

A trauma triage guide revision just issued by the Centers for Disease Control and Prevention updates their 2009 document. The American College of Surgeons is also revising their "Optimal Resources" guide for trauma care. These revisions will be used for a review of our trauma triage criteria, although in most cases the new guideline matches our trauma triage criteria and there would be few significant changes. Thanks to Chris Van Gorder of Scripps Health for his participation.

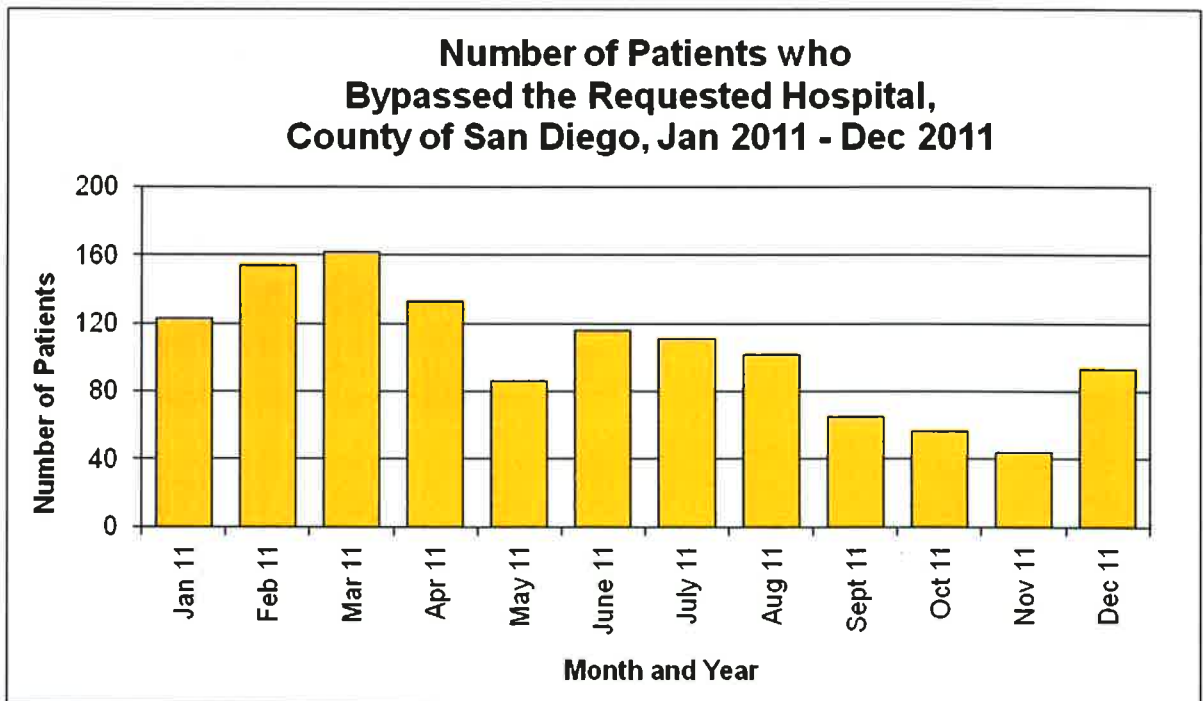
Current, up to date disaster information and preparedness recommendations are available at one OES website, www.sdcountyemergency.com.

A new statute outlaws sales of synthetic cannabinoids such as Spice and K-12.

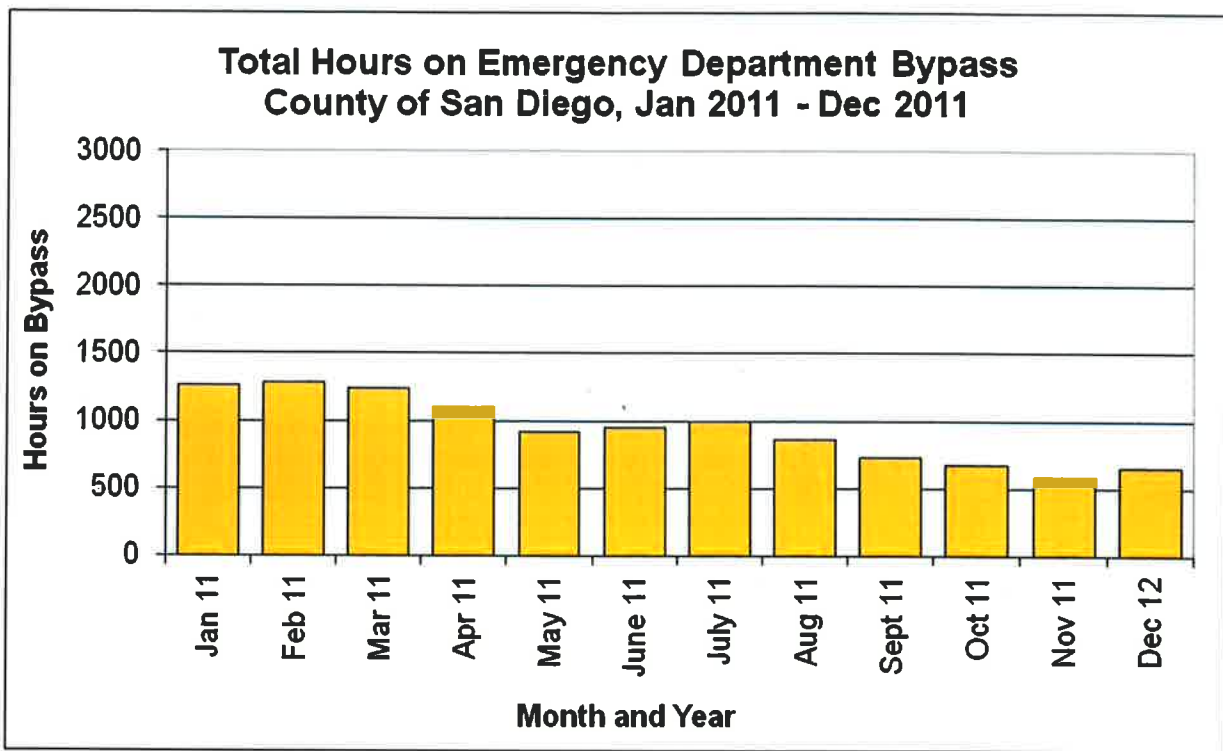
Narcotic use results in serious skin infections. Patients should be evaluated for potentially serious infections and illness from contaminants. One is toxic shock syndrome in which a small area of infection at needle puncture site causes systemic sepsis and a spreading area of necrotic infection that may be life-threatening without surgery. Another is a contaminant that may result in dark purpuric (purple appearing) lesions, especially on the tips of nose or ears. This is associated with depression of white cells and serious infection.



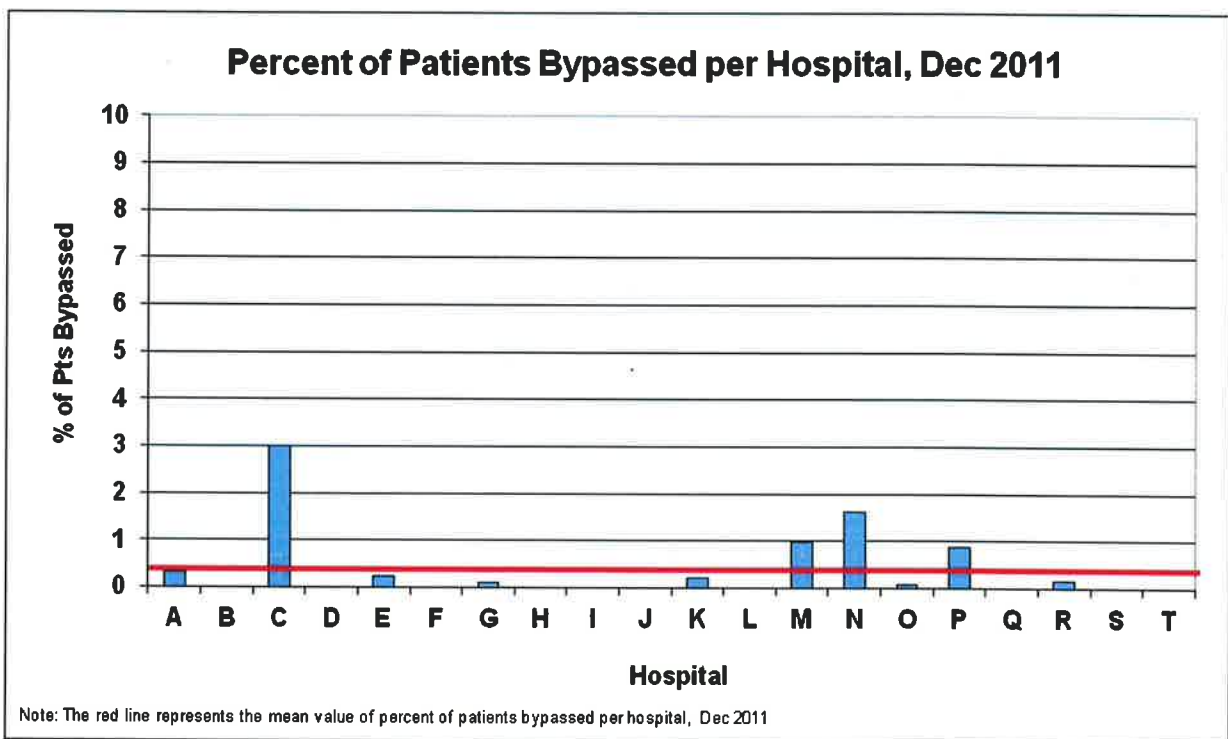
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, MICN Records, Jan 2011 – Dec 2011 Note: Numbers based on Run Outcomes of Transport by Unit and Transport by Other



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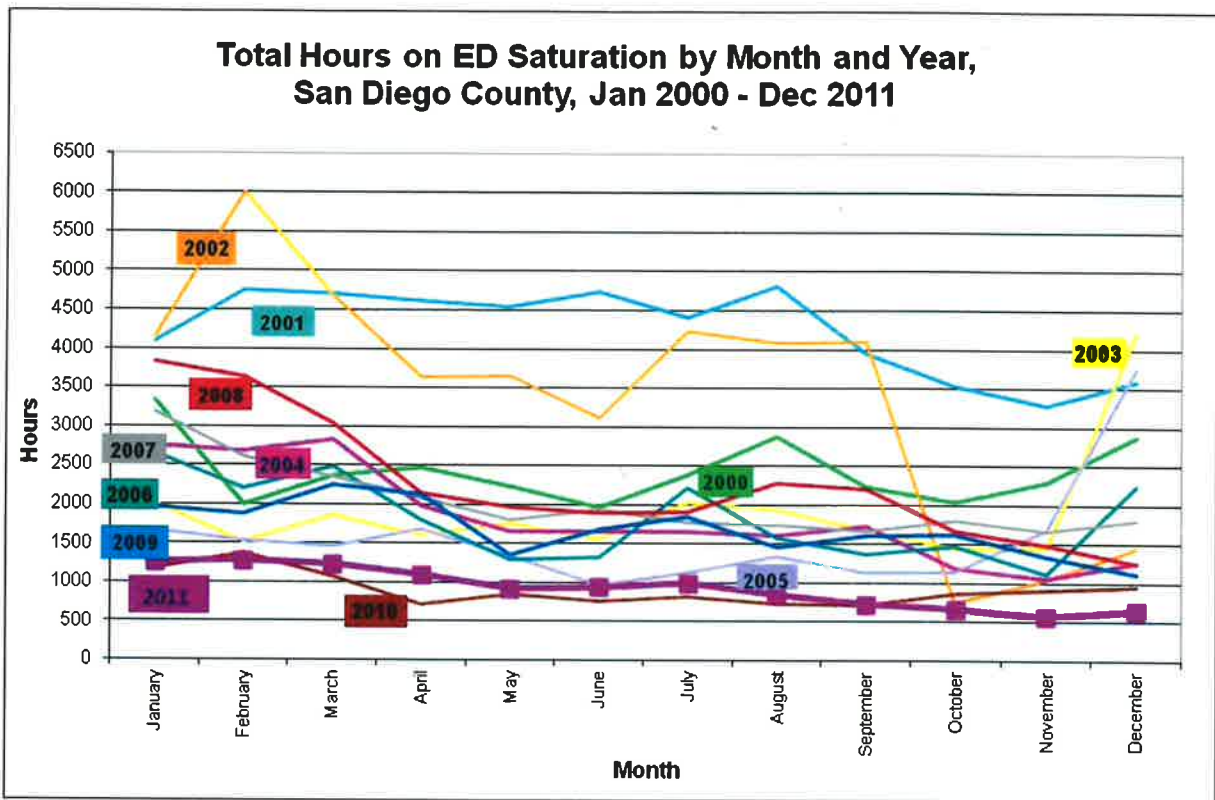


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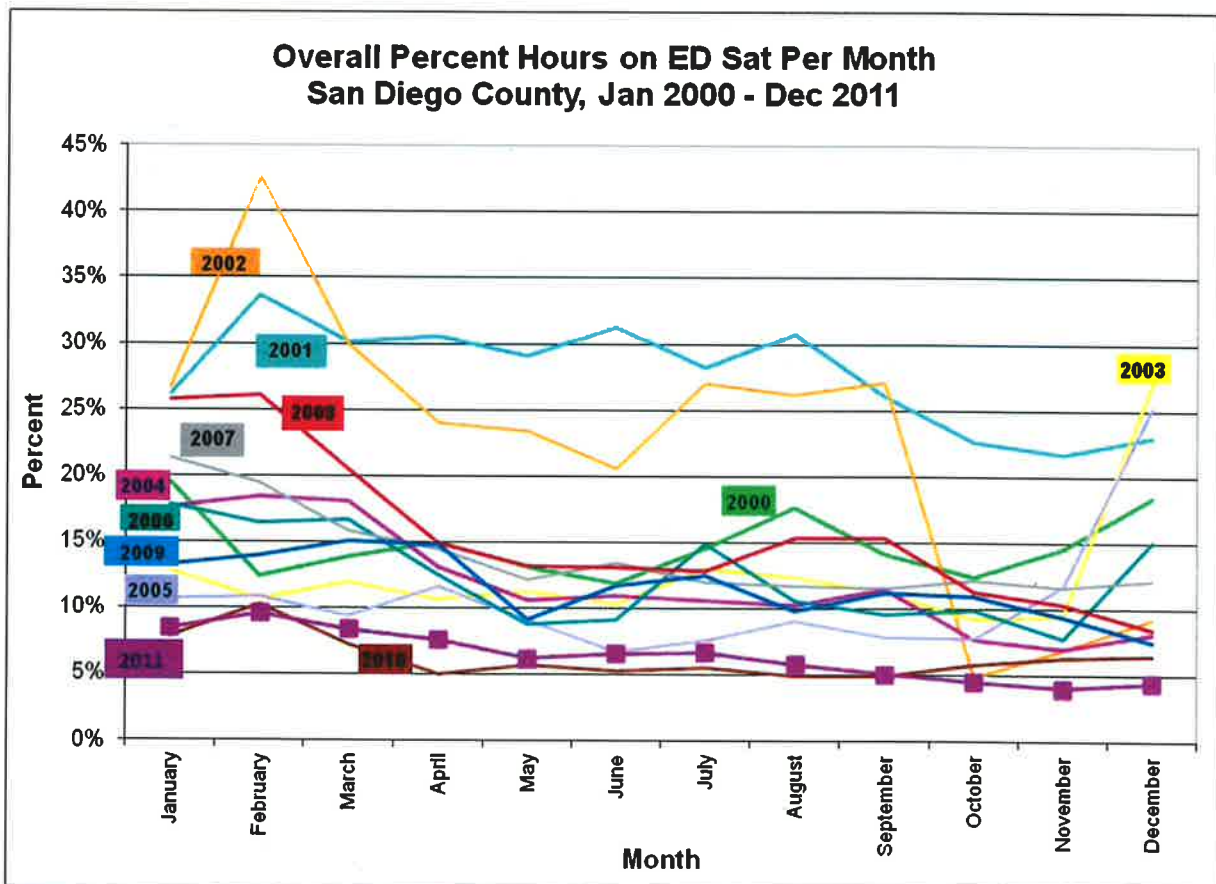


Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, MICN Records, Dec 2011

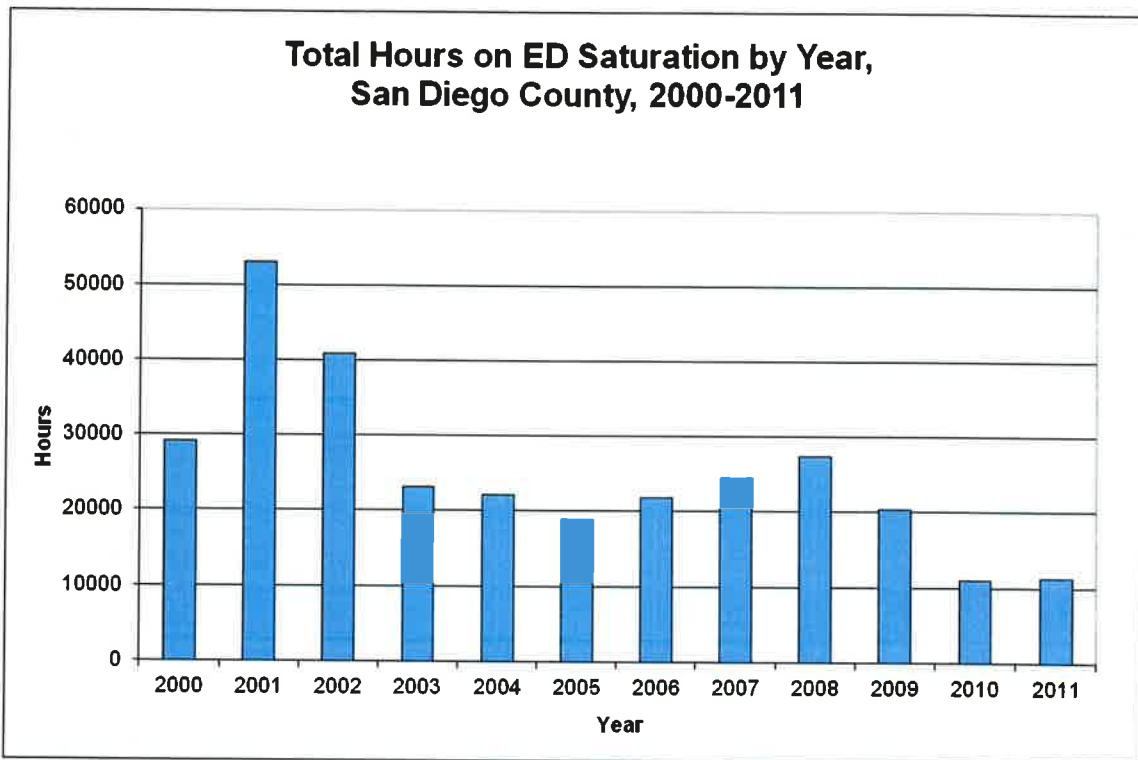
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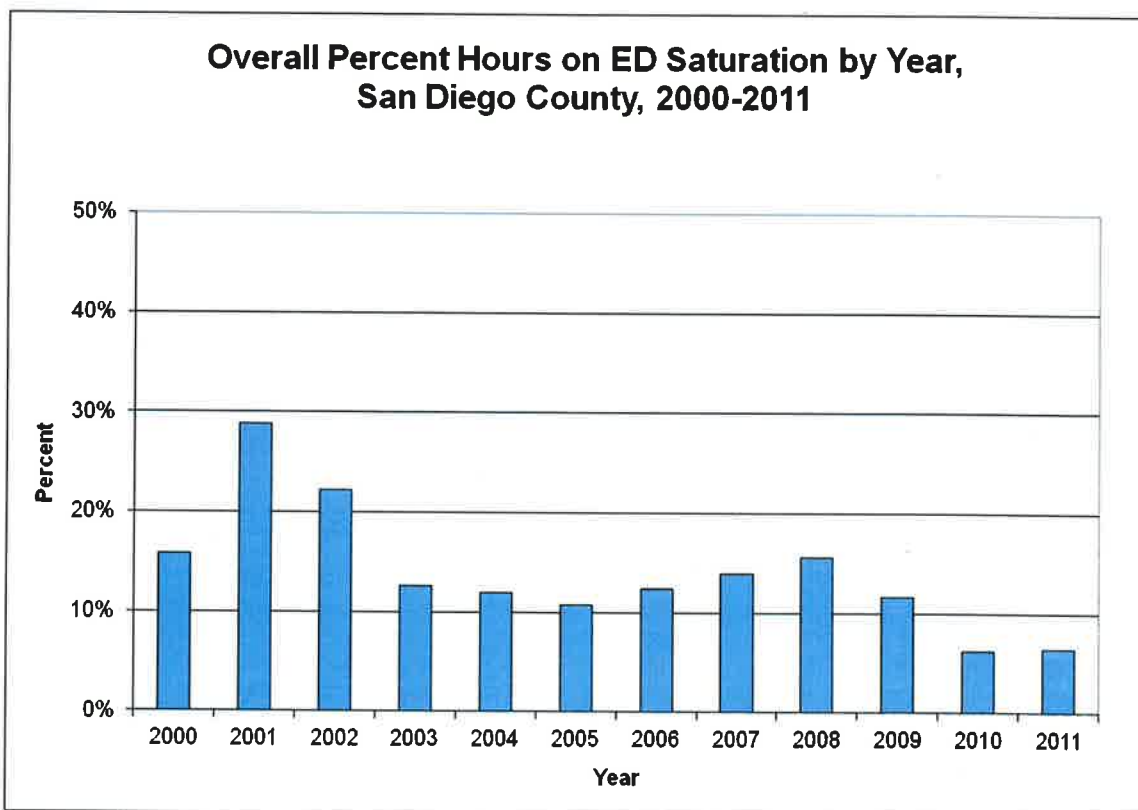
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Medical Director's Update for Base Station Physicians' Committee February, 2012

A Flu Season uptick has occurred over the last several weeks. Influenza is "widespread" in California. Our public health Influenza Watch reports a large jump in the last report. We seem to be experiencing a later flu season than usual. Most of the isolates are influenza A. A number of the EDs report they are busy, although surveillance shows it is within a typical time. There have been a lot of patients with fever.

Norovirus outbreaks have hit some residential care facilities and skilled nursing facilities. Please find a summary of information about norovirus below.

Drug shortages continue. Midazolam is predicted to be more available any time now (mid-February), although information on availability is not always certain during these shortages. There is availability of morphine, although in some cases in a different concentration. Our thanks to our local suppliers for their cooperation and assistance.

Intramuscular midazolam was compared to IV lorazepam in a New England Journal of Medicine article last week in the treatment of status epilepticus. Lorazepam is considered a first line treatment, while many EMS systems, like ours, use midazolam. The RAMPART study assigned 893 adults and children to a treatment group. The characteristics of the groups were well matched. The dose of midazolam was similar to what we use.

Seizures were absent without rescue therapy in 73% of the IM midazolam group vs 63% of the IV lorazepam group. The two treatment groups were similar in need for endotracheal intubation (14%), and recurrence of seizures, midazolam 11%, lorazepam 11%. Of patients randomized to IV treatment, 31 who didn't reach primary outcome never received the IV study medication because of failure to obtain vascular access. Only 5 patients in the entire intramuscular group did not receive IM owing to problems with IM autoinjector used. The time to administration of active treatment was shorter by

IM than IV, 1.2 vs 4.8 min, but termination of seizures occurred sooner after IV administration, 1.6 vs 3.3 min, so the overall interval until termination of convulsions was similar in the two treatment groups. For subjects in status epilepticus, intramuscular midazolam is at least as safe and effective as intravenous lorazepam for prehospital seizure cessation.

This study supports the use of intramuscular midazolam in status epilepticus.

Simple oxygen masks used in children should have a minimum oxygen flow rate of 5 L/min.

Careful patient assessment when spinal stabilization is applied is important to find any neurologic deficits. In addition, correct documentation reflecting the assessment is equally important. The assessment should document post-immobilization findings.

The County's first Advanced Emergency Medical Technician class is underway at EMSTA. We wish them success.

This is the year for limited changes in our protocols. The implementation of changes in data collection also limits the changes that could be made. There may be a limited number of changes.

The State EMS Authority recently took comments on limited revisions to the Advanced EMT and EMT regulations focused on consistency with national education standards and instructional guidelines, including length of courses and in some cases scope of practice. Advanced EMT would go from 88 hours to 160, and EMT from 120 to 160 hours.

Hospital training in decontamination procedures and hands-on use of personal protective equipment is being done by the County's Department of Environmental Health. Contact EMS if you have questions, or would like your facility to take part.

Pediatric surge training is underway. This class helps non-pediatric hospital prepare to respond to large numbers of pediatric patients when Children's may be unable to take all patients. It is two half days. Contact EMS for more information.

A Burn Surge program is under development. This would give non burn center hospitals the information and supplies to treat burn patients during a large scale burn event. It would facilitate triage of the most badly burned patients to the UCSD burn center, while less severely burned patients, but who need resuscitation and burn management could receive care at one of the trauma centers for several days until the point they need grafts. The moderately burned patients would go to 911 receiving hospitals as seems appropriate. You will hear more about this.

Recommendations for Control of Norovirus for EMS Responders February 2012

Noroviruses, formerly referred to as “Norwalk-like viruses,” are common: the Centers for Disease Control and Prevention (CDC) estimates that more than 21 million cases of acute gastroenteritis each year in the United States are caused by norovirus infection. Noroviruses may be spread by person-to-person contact or by contact with contaminated surfaces, including door knobs and bathroom surfaces, or by ingestion of contaminated food. Norovirus outbreaks often peak in winter but do occur year round. There have been several recent outbreaks in local skilled nursing and other residential facilities. Similar outbreaks have been recognized in other California communities. There is no vaccine, nor long-term immunity for norovirus. The best protection is reducing the risk of infection.

Norovirus infection can cause acute gastroenteritis characterized by watery, non-bloody diarrhea, abdominal cramps, nausea and vomiting. Norovirus illness has an incubation period of 12 to 48 hours and duration of 12 to 60 hours. Young children, elderly persons, and hospitalized patients may be ill longer. Treatment of norovirus infection is supportive, consisting of maintenance of hydration and rest.

Noroviruses are spread primarily through contact with an infected person’s stool or emesis. As mentioned above, this may occur through direct person-to-person contact, through ingestion of contaminated food or water, or through contact with contaminated surfaces. There is no evidence of respiratory transmission; however, transmission may occur through aerosolization of emesis when particles of emesis contaminate surfaces or come into contact with mucous membranes and are swallowed. Transmission of norovirus is aided by the extreme hardiness of the virus in the environment, as well as its highly infectious nature. The infectious dose is believed to be as low as 10 viral particles, while approximately one million particles are excreted per milliliter of stool. Shedding usually occurs while the person is ill and for up to two weeks post-recovery. However, people infected with and shedding norovirus may be asymptomatic.

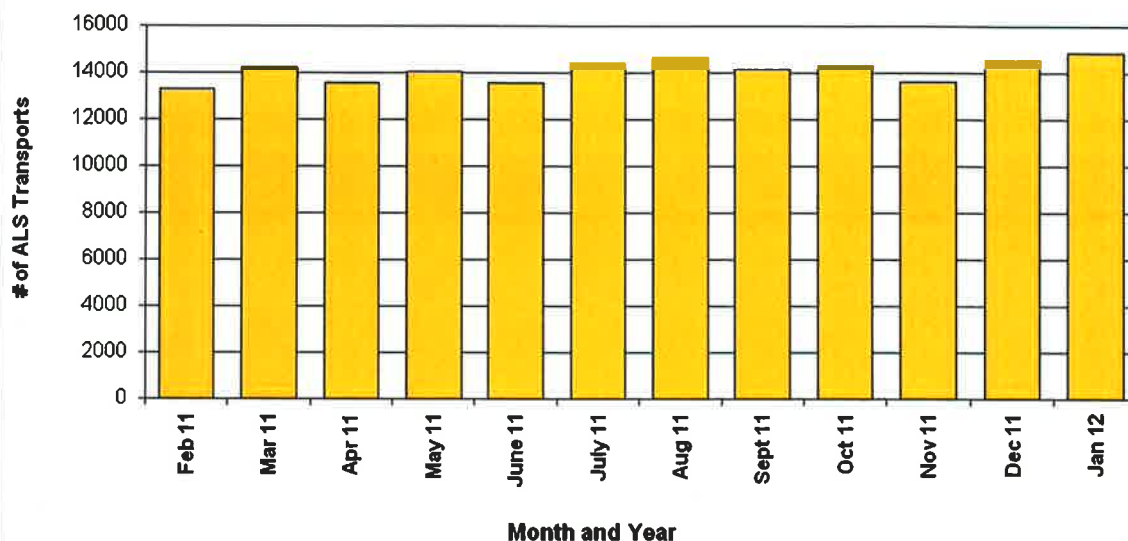
Specific recommendations for management of norovirus for EMS responders include:

1. Contact precautions should always be observed by the responder when there is potential contact with body fluids that are not one’s own.
 - a. Gown and gloves should be worn when transporting patients.
 - b. In the presence of an actively vomiting patient, or when cleaning a heavily soiled area, the responder should wear a long-sleeved gown, gloves, and a surgical mask.
 - c. The responder should refrain from touching their own mucous membranes unless hands have been washed first.
2. Proper handwashing with soap and running water for at least 20 seconds is the most effective way to reduce norovirus contamination on the hands. Alcohol-based waterless hand rubs appear to be relatively ineffective against norovirus. If proper hand washing facilities are not available, remove debris from the hands with a disposable towelette, followed by use of a hand-sanitizing rub containing at least 70% ethanol. Hand washing should be performed before and after patient contact, and after glove removal, use of the restroom, and at the end of the shift. Bare arm

and any other skin that might have been exposed during a vomiting incident should also be cleaned in a similar fashion.

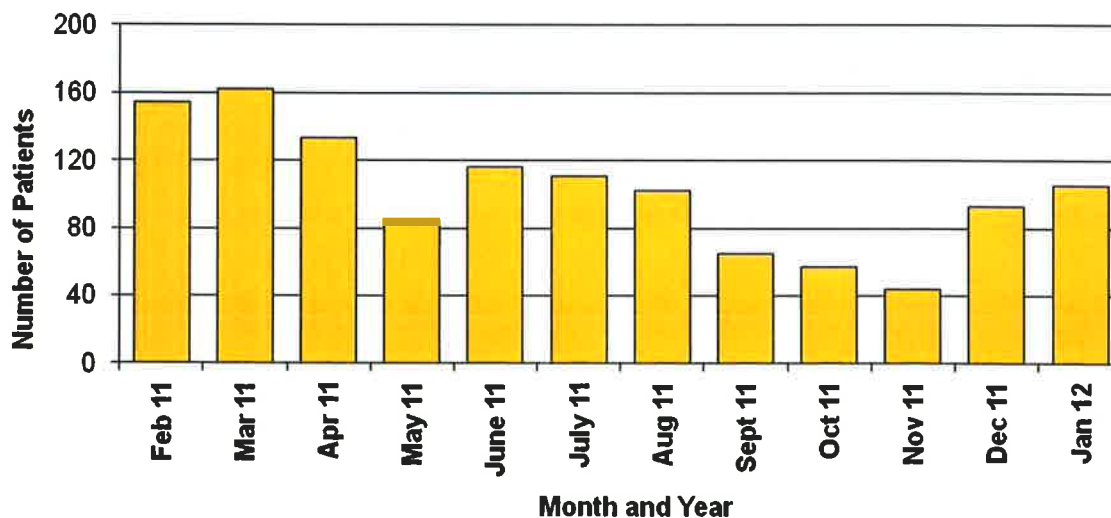
3. If the responder has been potentially contaminated by the emesis of a patient, the responder's outer clothing should be changed or covered with a disposable jumpsuit prior to further patient or environmental contact when possible.
4. If a patient has diarrhea, or especially if they have projectile vomiting while in the care of the responder, the following sanitation must be done BEFORE use of any exposed equipment for another call:
 - a. Wearing gown, gloves and a surgical mask, scrupulously clean up all vomitus and stool using disposable absorbent material and minimizing aerosols.
 - b. Following manufacturer's instructions for contact time, disinfect the entire area *within an 8-10 foot range of the vomiting incident* with a 1:10 dilution of fresh bleach or another product that has an Environmental Protection Agency (EPA) norovirus kill claim.
 - c. If disposable supplies (e.g., dressings) have been exposed they should be disposed in an appropriate receptacle. Non-disposable equipment such as gurney straps, BP cuffs, etc. should be cleaned and disinfected as instructed above.
 - d. Failure to be meticulous with cleanup may lead to norovirus remaining in the environment and subsequent employee or patient infections.
5. Report the patient's condition to the receiving facility.
6. EMS responders who experience symptoms of norovirus should not return to work until they are symptom-free (no diarrhea or vomiting) for at least 48 hours. Upon returning to work, they must practice scrupulous handwashing.

Number of ALS Transports, County of San Diego, Feb 2011 - Jan 2012

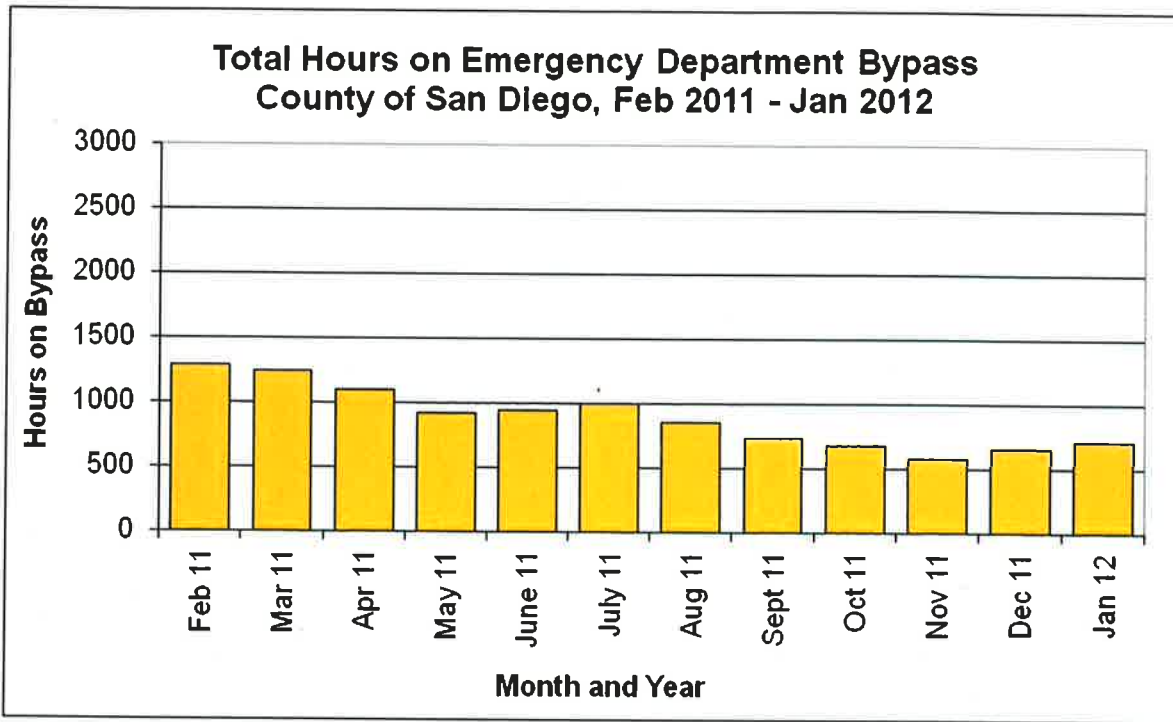


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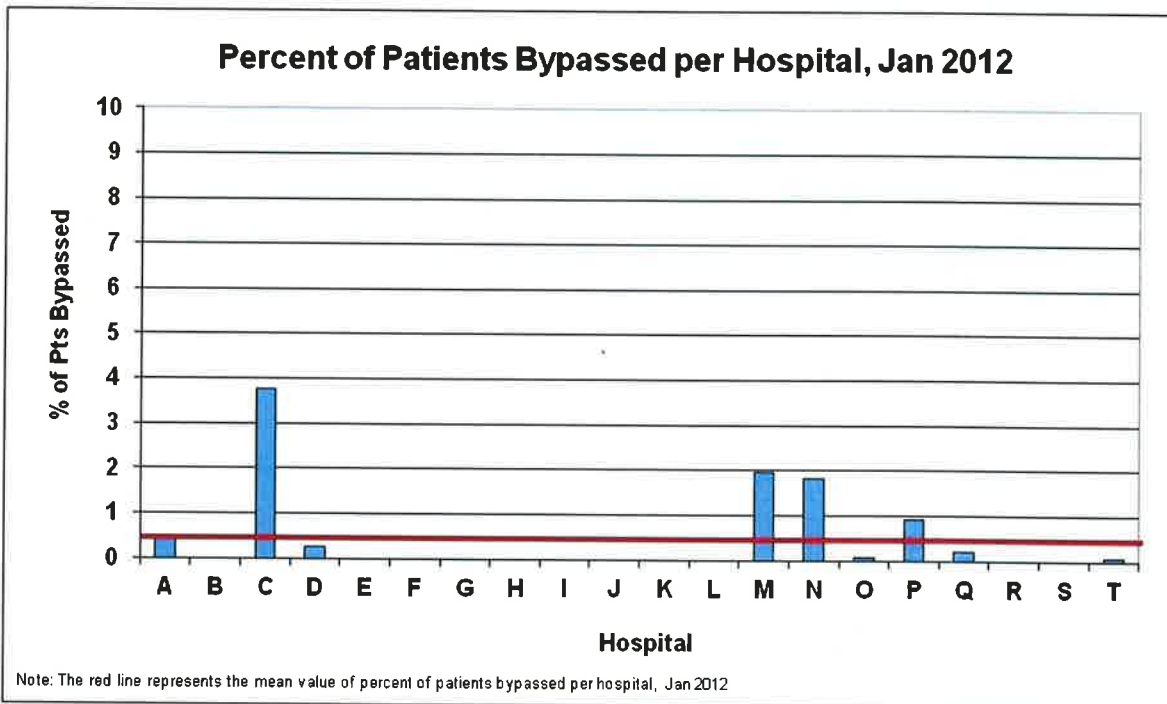
Number of Patients who Bypassed the Requested Hospital, County of San Diego, Feb 2011 - Jan 2012



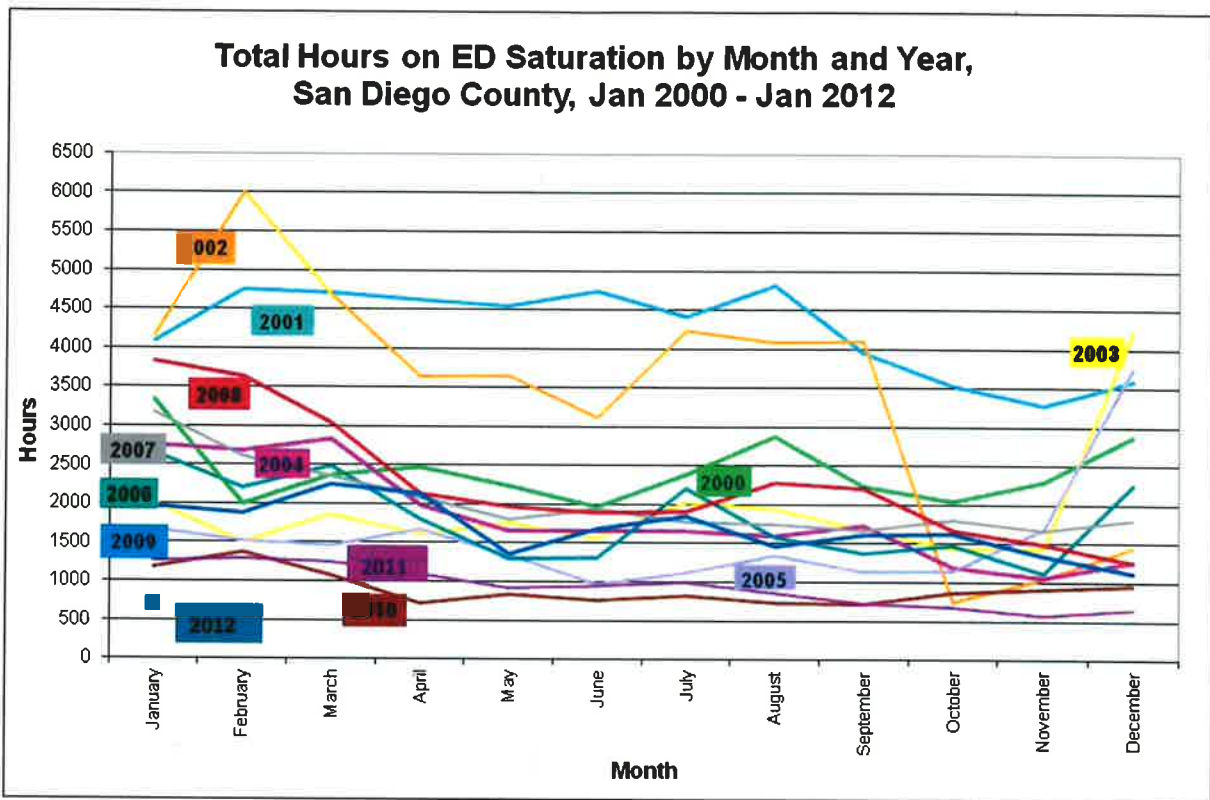
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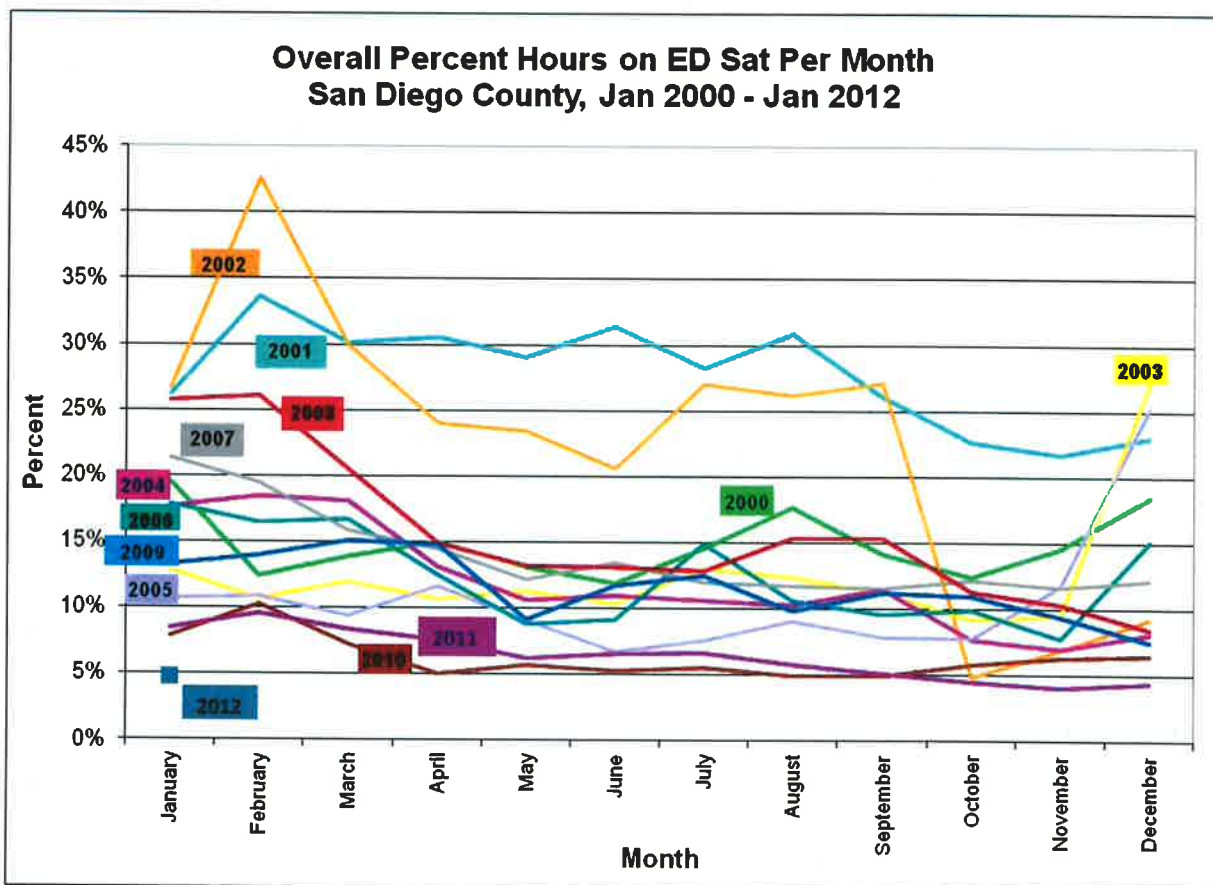
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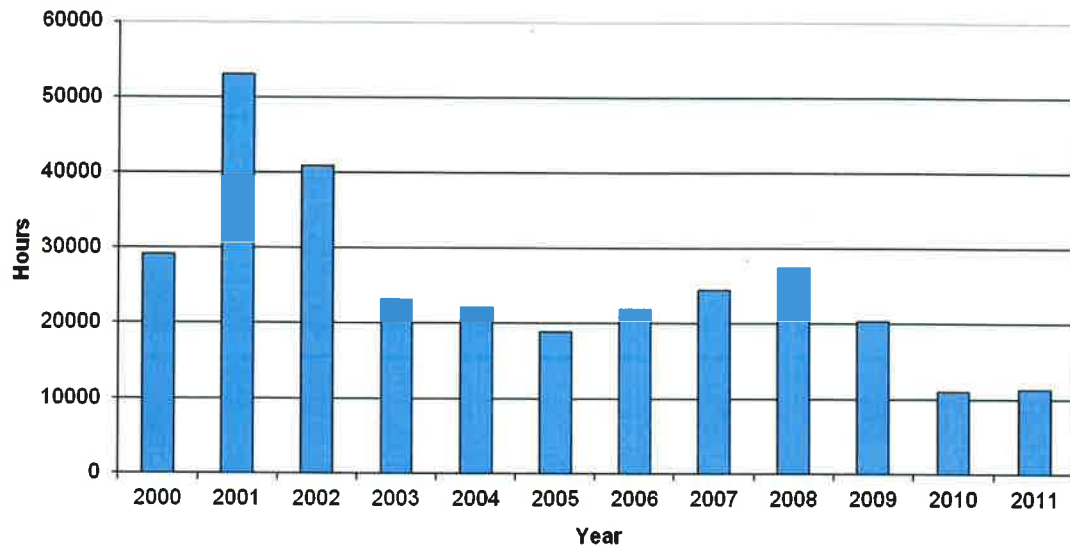


Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, MICN Records, Jan 2000 – Jan 2012



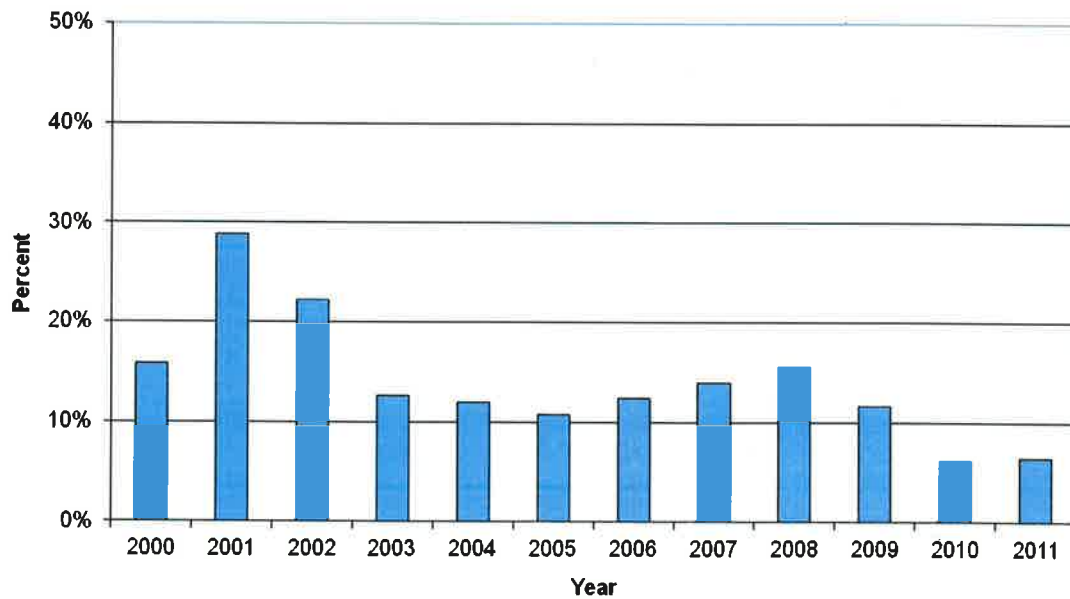
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, MICN Records, Jan 2000 – Jan 2012

**Total Hours on ED Saturation by Year,
San Diego County, 2000-2011**



Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, MICN Records, 2000 – 2011

**Overall Percent Hours on ED Saturation by Year,
San Diego County, 2000-2011**



Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, MICN Records, 2000 – 2011



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Medical Director's Update for Base Station Physicians' Committee April, 2012

Drug shortages that affected our supplies of midazolam and morphine have eased. Midazolam supplies should be up to date, although recently our normal concentration may be limited. Morphine is also available, although still not necessarily in large quantities of prefilled syringes. In some cases, use of vials will be necessary for some additional time. Medication shortages are receiving national attention and we hope some of the reasons will be explored and solved.

"Strike Out Stroke 2012" is a day at PETCO park for education about stroke and a ballgame. The date of the event is May 1st, 7:10 pm. Stroke risk factors will be explained, with blood pressure checks and other risk factor assessment available to attendees. Special emphasis will be placed on stroke warning signs and symptom awareness. The FAST stroke warning test will be taught: Face—uneven smile, facial droop/numbness, vision disturbance; Arm & Leg—weakness, numbness, difficulty walking; Speech—slurred, inappropriate words, mute; Time—Time is critical, call 911.

Discount tickets are available. Contact Diane Royer, RN. at EMS, Diane.Royer@sdcounty.ca.gov. This is sponsored by the Stroke Consortium, San Diego EMS, and many others.

Sidewalk CPR occurs June 7, between 10 am and 2 pm. We encourage you to establish a site. This event seeks to train 2012 people in compression only CPR, at a variety of venues around the county. Volunteers should be competent in CPR, but need not be certified instructors. Contact Ruth Duke at EMS for more information, Ruth.Duke@sdcounty.ca.gov, or 285-6429.

This is an off year for protocol changes, but minor changes and education are being prepared. Audits reveal that midazolam use increased substantially after it was added to the Behavioral protocol. A Pearl from February cautioned against use in patients who were intoxicated. The dose and/or contact criteria may be revised. Another educational focus will be on the increasing number of patients with left ventricular assist devices, which are now used more as a "destination" device, not simply a bridge to transplantation.

Policy changes include both the do-not-resuscitate (Resuscitation, S-414) and restraint (S-422) policies. DNR changes incorporate the POLST form, and clarify the Advance Health Care Decision

law, including attorneys in fact. It also addresses orders in an electronic medical record, and destinations. Changes to the restraint policy add information on spitting patients and patient restraint of extremities and positioning.

A recent Union Tribune 5 part series explored frequent users transported to emergency departments. It appeared April 1-5. Dr. Jim Dunford was featured outlining the problem and new attempts to improve the situation, working with the United Way and other partners to reduce inappropriate EMS use. Interventions included finding housing for these persons.

The state issued Emergency Medical Services for Children (EMSC) draft regulations. The proposal would set standards for identifying different levels of receiving hospitals, data systems, equipment standards, and performance improvement systems.

Proposed paramedic regulations are also out for final comments. Changes being proposed include updating the basic scope of practice to reduce need for optional scope items, and changes in the proposal for paramedic CCT programs, including training and scope items. Comments on this document are due April 21.

The first Advanced Emergency Medical Technician (AEMT) provider is close to approval. The Border Patrol BORSTAR team will be the provider, serving the border area.

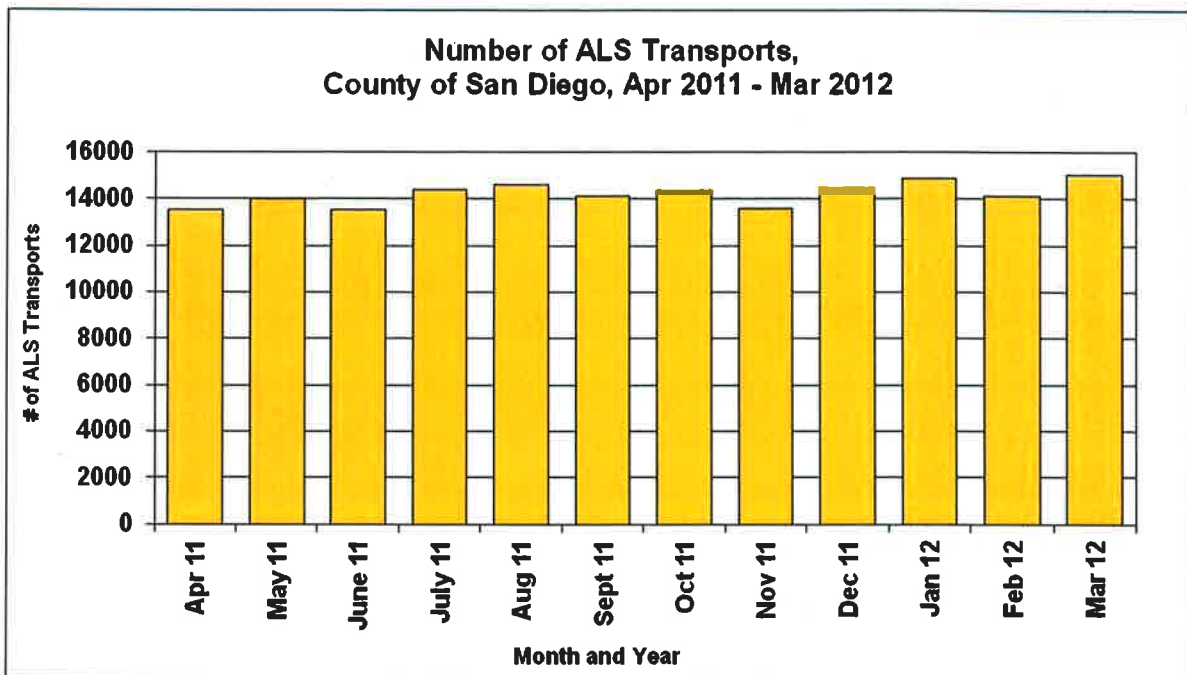
EMS and the UCSD led Beacon initiatives are working on the EMS Hub. This holds promise for improved data collection and availability of clinical information. One of the early goals is the transmission of field 12-lead EKGs.

The trauma centers are currently going through verification reviews for continued designation. This occurs every three years.

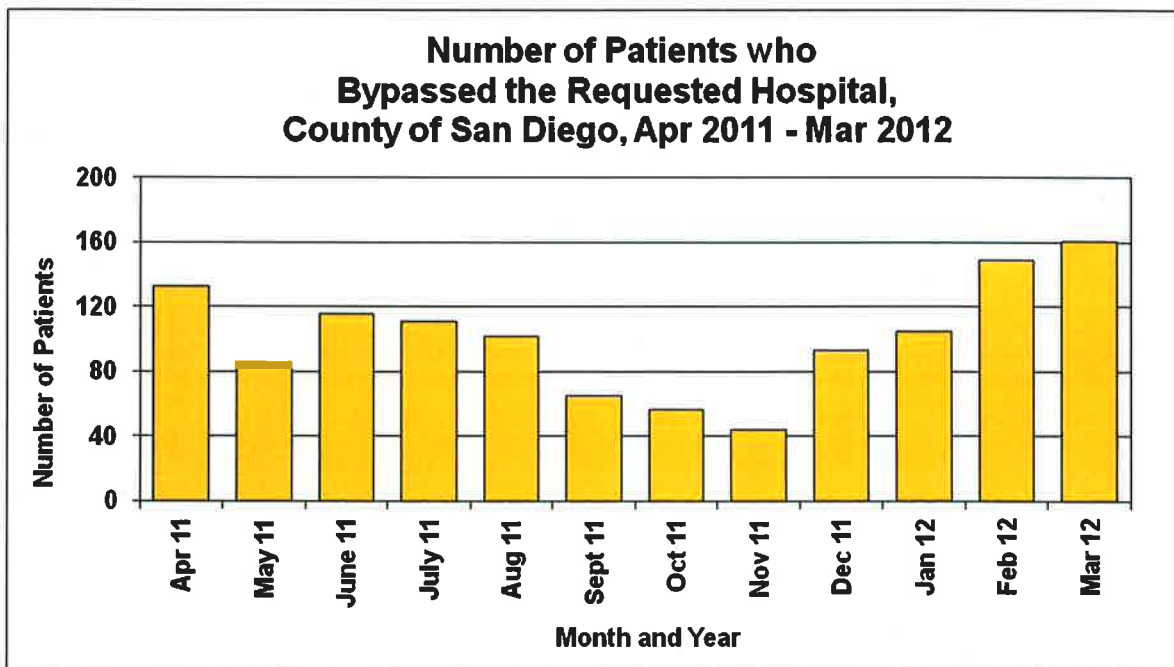
Khat is a shrub native to northeast and east Africa that has stimulant effects and chronic use can result in physical exhaustion and suicidal depression. The drug is often consumed as a tea, or chewed and stored in the cheek. Khat can induce manic behavioral effects, hyperactivity, hallucinations, and psychosis. The drug is common in cities with high populations of persons from Somalia, Ethiopia, and Yemen. EMS treatment is similar to stimulants.

The STEMI receiving system continues to function well. Almost 4700 patients have entered the system, with 1,668 receiving a percutaneous coronary intervention for reperfusion. Door to balloon times and other clinical markers remain excellent. Transmission of 12-leads will be reviewed.

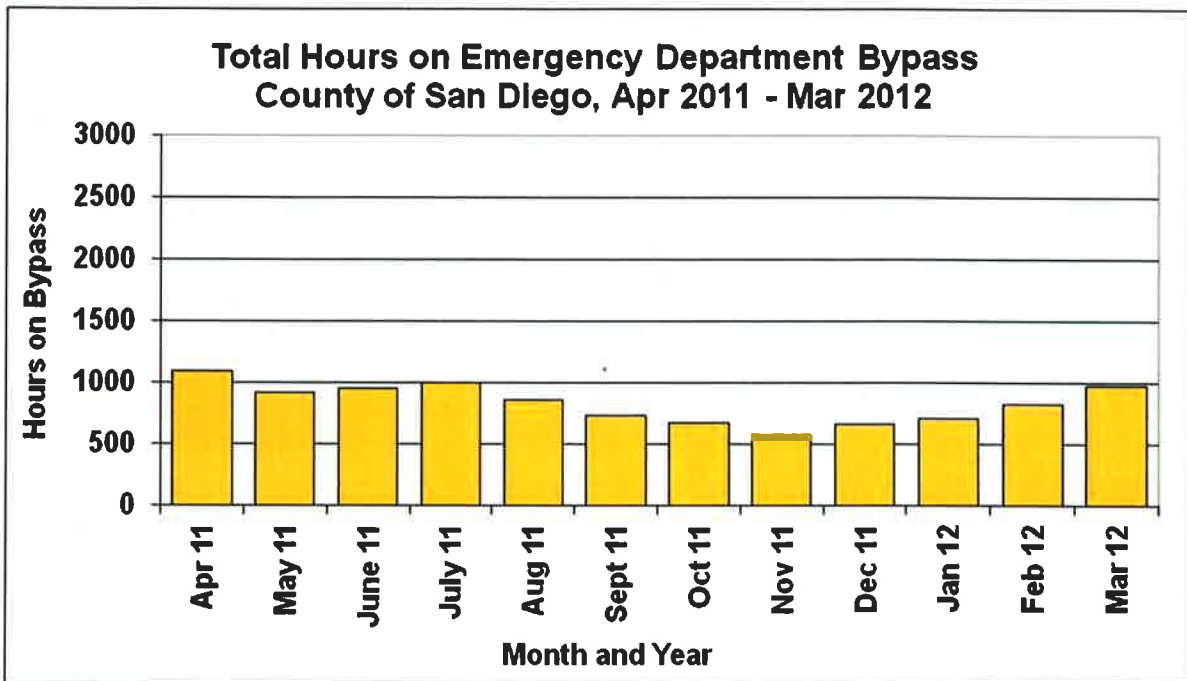
Epinephrine in cardiac arrest was evaluated in a large Japanese prospective observational research trial from a registry. They found epinephrine was associated with increased return of spontaneous circulation, but a decreased chance of survival or good functional outcome at one month after the event. The examination of cardiac arrest medications will continue.



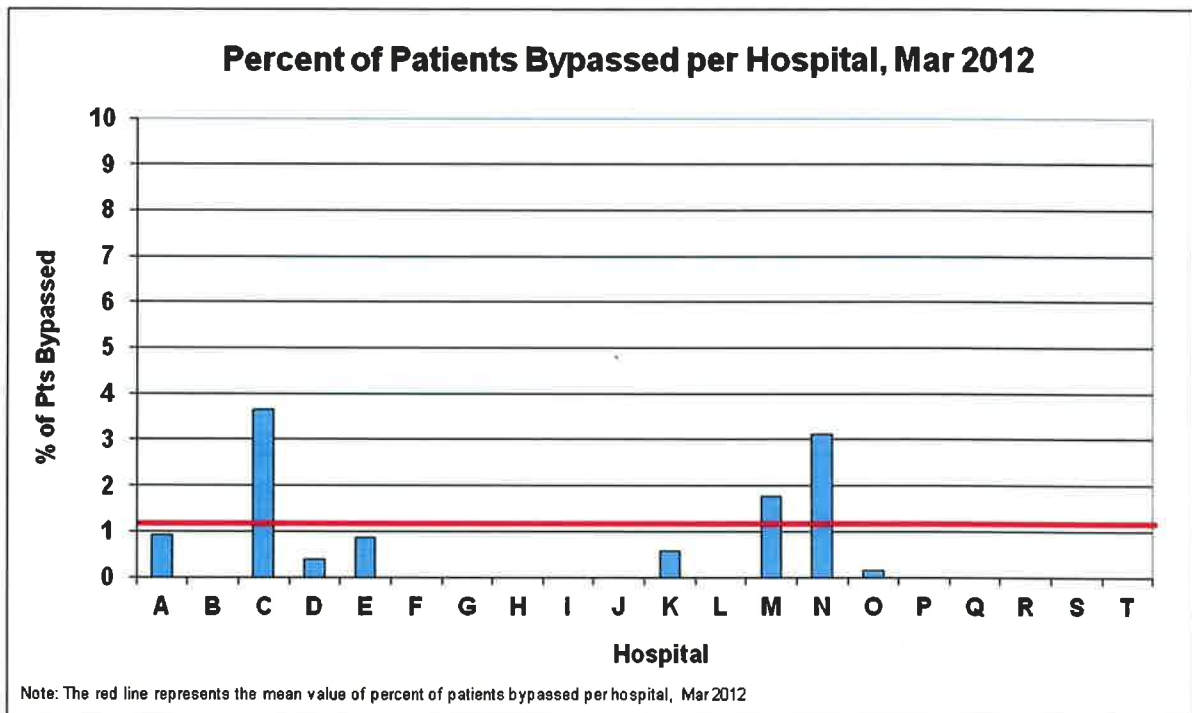
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, MICN Records, Apr 2011 – Mar 2012 Note: Numbers based on Run Outcomes of Transport by Unit and Transport by Other



Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, MICN Records, Apr 2011 – Mar 2012 Note: Numbers based on Run Outcomes of Transport by Unit and Transport by Other

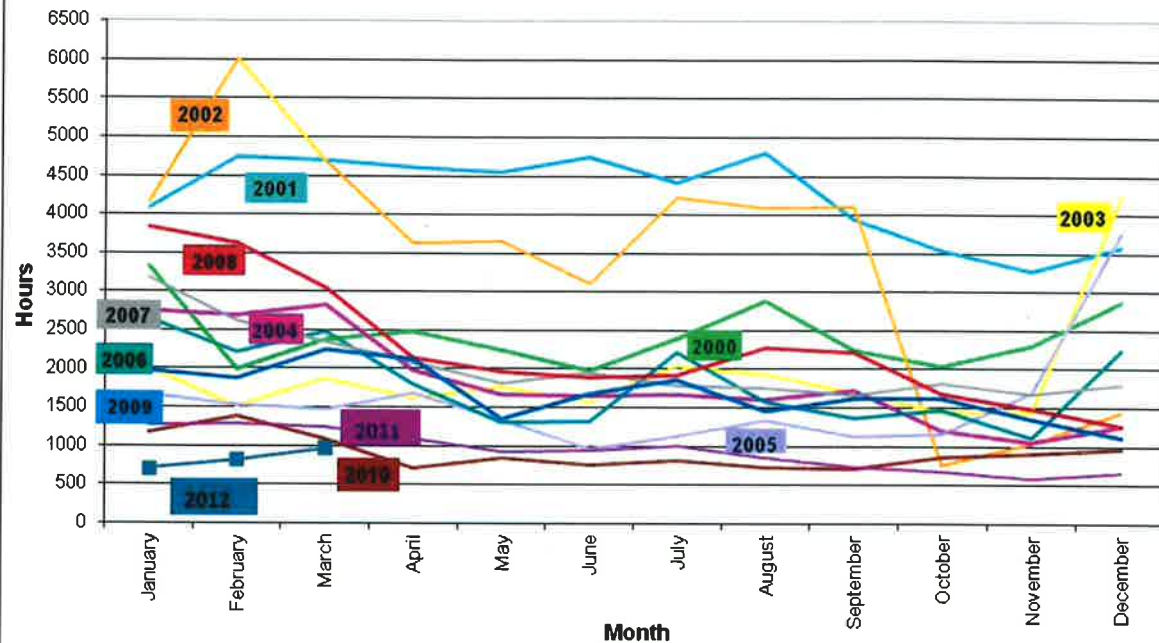


Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, MICN Records, Apr 2011 – Mar 2012



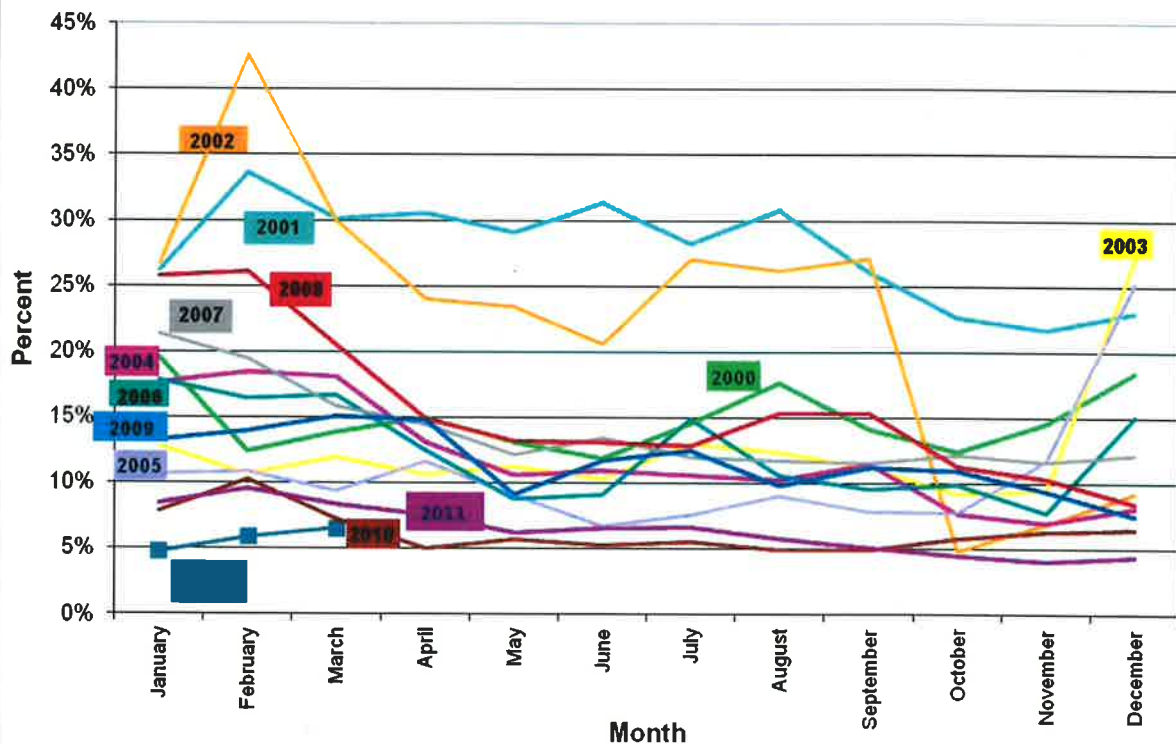
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, MICN Records, Mar 2012 Note: Numbers based on Run Outcomes of Transport by Unit and Transport by Other

Total Hours on ED Saturation by Month and Year, San Diego County, Jan 2000 - Mar 2012

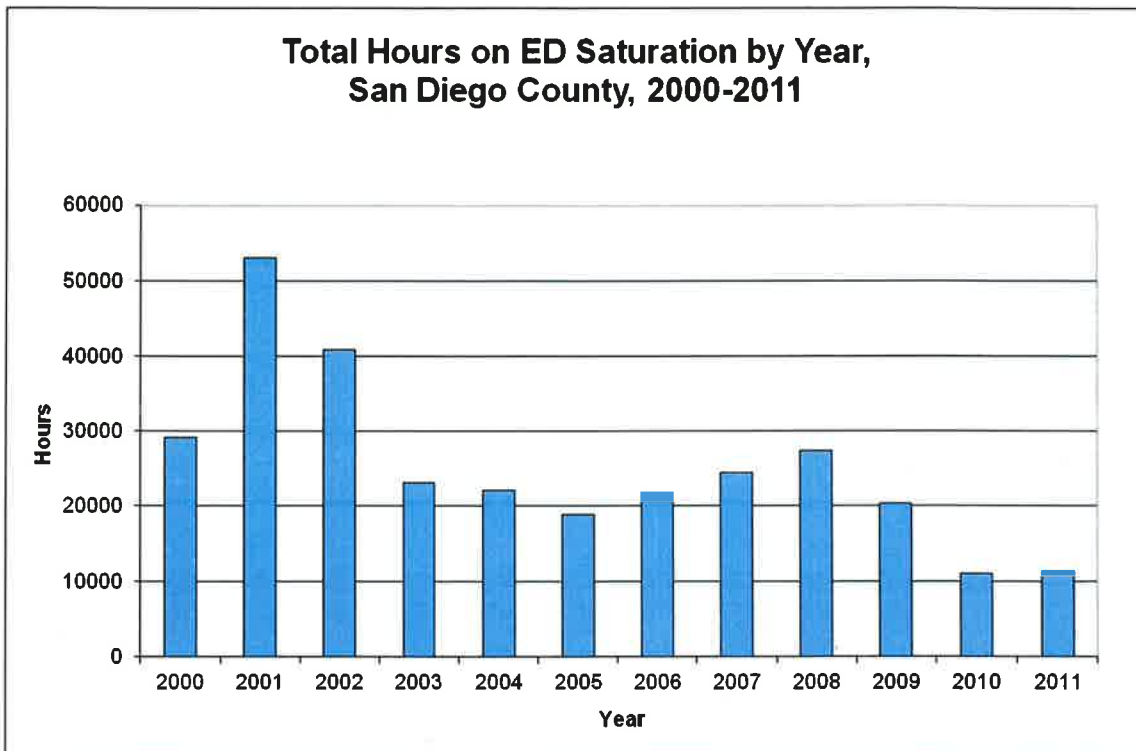


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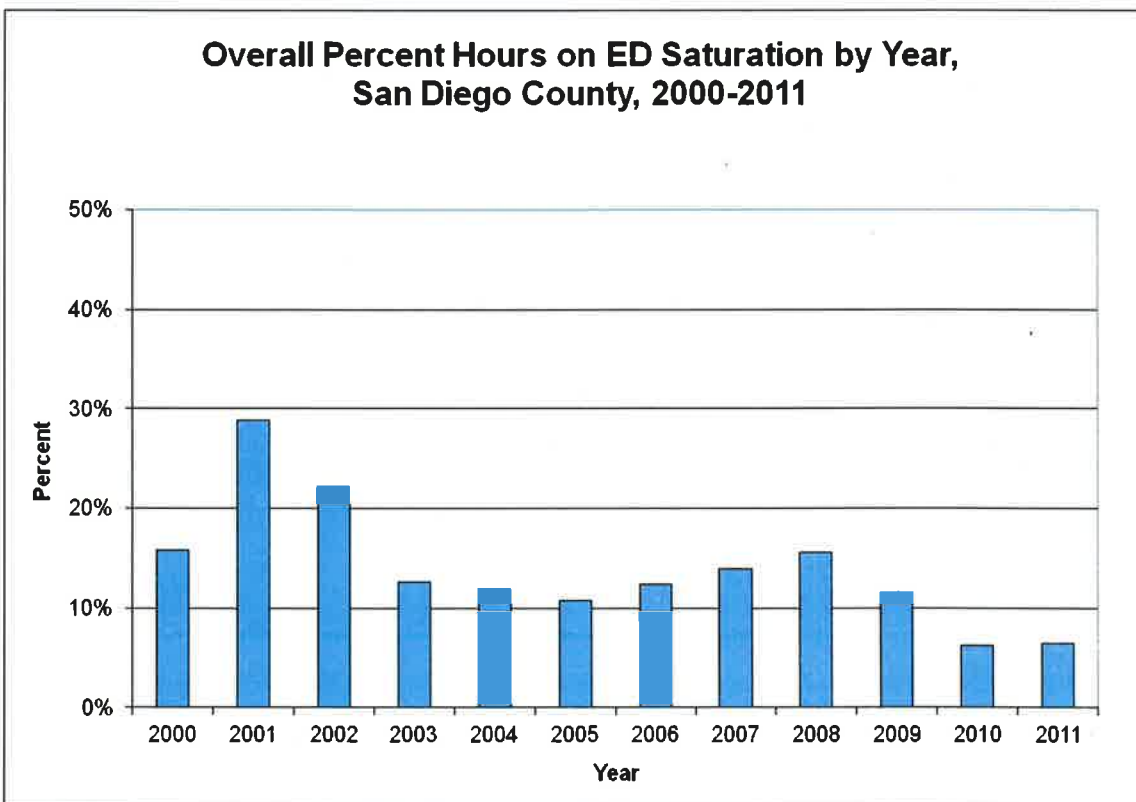
Overall Percent Hours on ED Sat Per Month San Diego County, Jan 2000 - Mar 2012



Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, MICN Records, Jan 2000 – Mar 2012



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Medical Director's Update for Base Station Physicians' Committee May, 2012

The most recent hospital bypass data are at long time lows (please see attached graphs). This is good, and the hospitals should be congratulated for their efforts. Reducing bypass can come at the expense of off load delays. For field crews, if you see the ED is busy make sure someone acknowledges your arrival and begins identifying a bed. If you are not acknowledged promptly, talk to hospital staff. If it appears there will be a prolonged off load delay or there are multiple units waiting, speak to the charge nurse. EMS may be notified for assistance when prolonged off loads occur, especially if multiple units are involved. The EMS Duty Officer may then assist. The Duty Officer is not someone compiling data. Do not call the Duty Officer if you have left the scene, or have not attempted the measures above. Thanks for your help with this.

The Golden Guardian disaster drill occurs tomorrow, May 16, 2012 for the broad part of the system. The scenario will be a large earthquake on the Southern San Andreas Fault, and our system's need to take patients from the impacted area. Most EOCs will be activated, with participation by the hospitals.

Strike Out Stroke 2012 reached out to the community with information on stroke risk factors and how to reduce them. Blood pressure checks and other evaluations were done by the stroke hospitals at the PETCO entry gate. Special emphasis was placed on stroke warning signs and symptom awareness. The FAST stroke warning test was taught: Face—uneven smile, facial droop/numbness, vision disturbance; Arm & Leg—weakness, numbness, difficulty walking; Speech—slurred, inappropriate words, mute; Time—Time is critical, call 911. Chairman Ron Roberts of the Board of Supervisors taped a scoreboard message on stroke and threw out the first pitch. Gathered with him were “stroke survivors” who benefited from rapid evaluation and treatment, and excellent follow-up care.

This is an off year for protocol changes, but minor changes and education are being prepared. Audits reveal that midazolam use increased substantially after it was added to the Behavioral protocol. A Pearl from February cautioned against use in patients who were

intoxicated. The dose and/or contact criteria may be revised. Another educational focus will be on the increasing number of patients with left ventricular assist devices, which are now used more as a “destination” device, not simply a bridge to transplantation.

Policy changes include both the Do-Not-Resuscitate (Resuscitation, S-414) and Restraint (S-422) policies. DNR changes incorporate the POLST form, and clarify the Advance Health Care Decision law, including attorneys in fact. It also addresses orders in an electronic medical record, and destinations. Changes to the restraint policy add information on patients who are spitting at rescuers, and patient positioning and restraint of extremities.

iQCS testing continues and should be finished soon. Roll out will be sometime this summer with training beforehand.

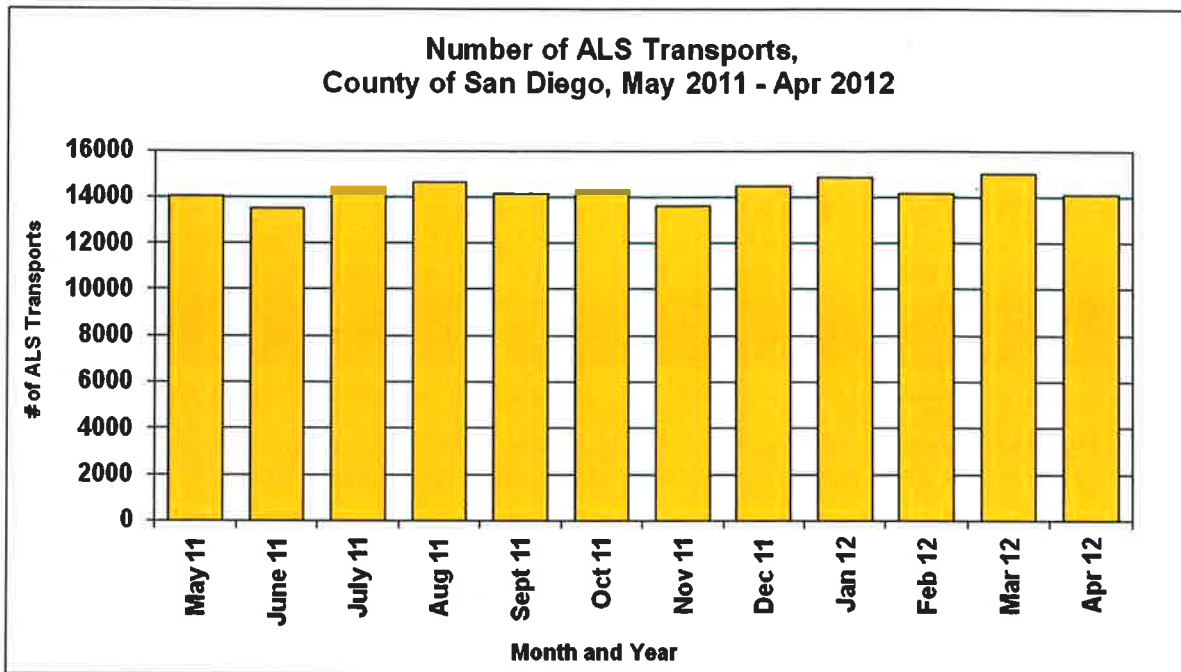
The state issued Emergency Medical Services for Children (EMSC) draft regulations. The proposal would set standards for identifying different levels of receiving hospitals, data systems, equipment standards, and performance improvement systems. Another draft will be circulated at some point.

Proposed paramedic regulations are also out again for comments. Changes being proposed include updating the basic scope of practice to reduce need for optional scope items, and changes in the proposal for paramedic CCT programs, including training and scope items.

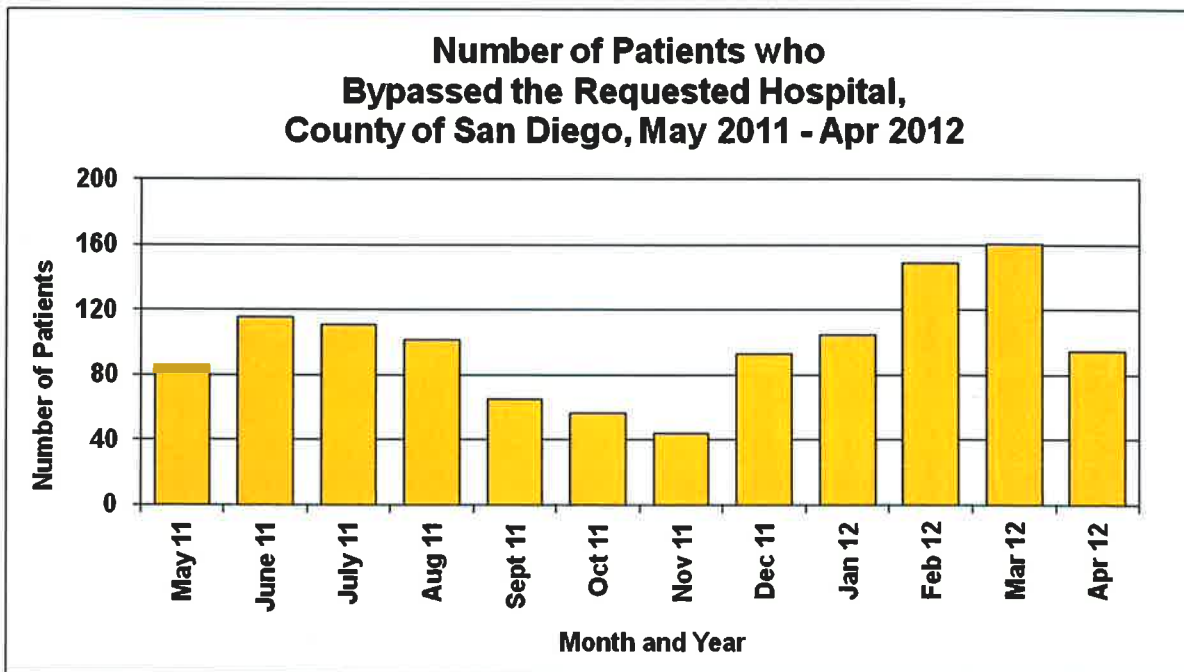
The first Advanced Emergency Medical Technician (AEMT) provider is close to approval. The Border Patrol BORSTAR team will be the provider, serving the border area.

EMS and the UCSD led Beacon initiative are working on the EMS Hub. This holds promise for improved data collection and availability of clinical information. One of the early goals is the transmission of field 12-lead EKGs.

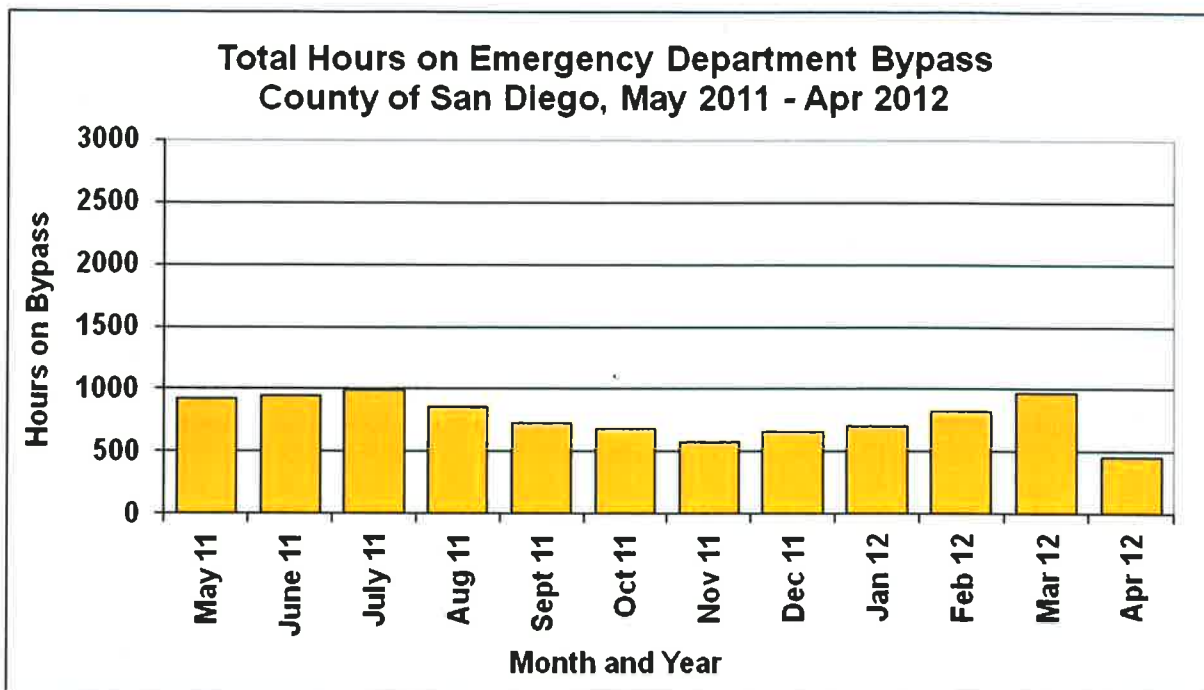
The trauma centers finished their verification reviews for continued designation. This occurs every three years.



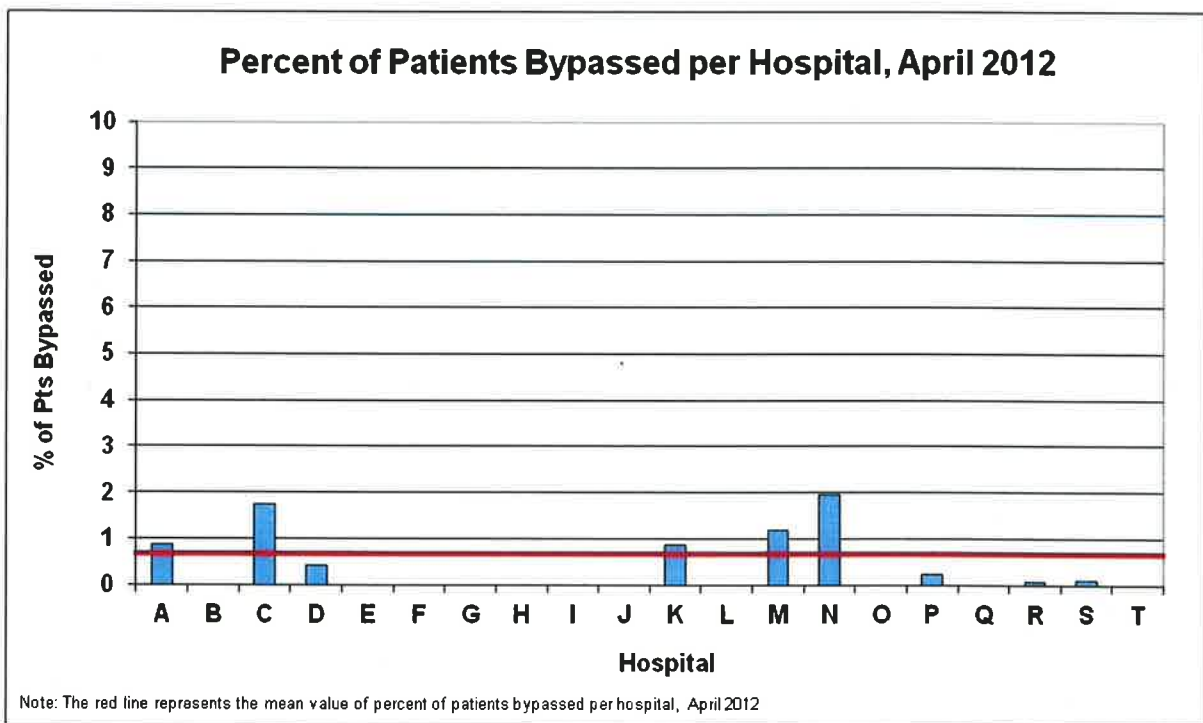
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, MICN Records, May 2011 – Apr 2012 Note: Numbers based on Run Outcomes of Transport by Unit and Transport by Other



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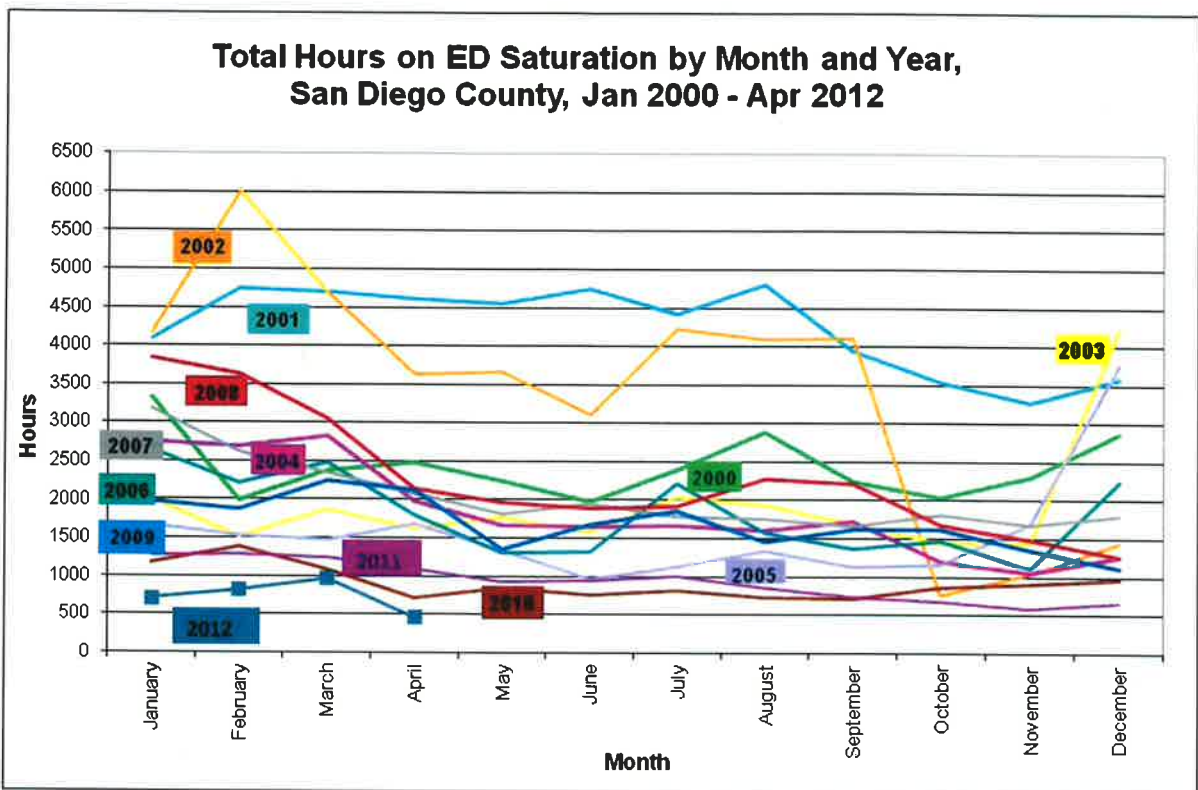


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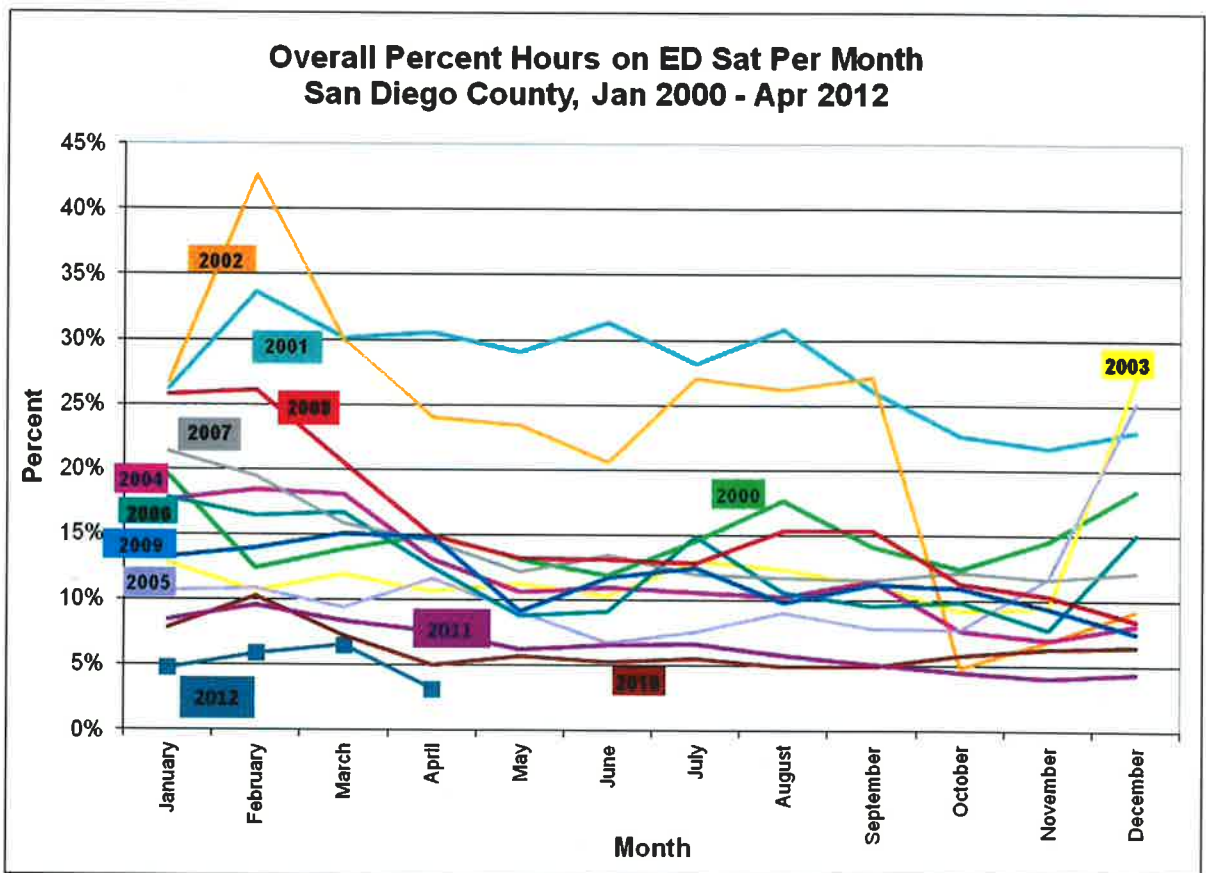


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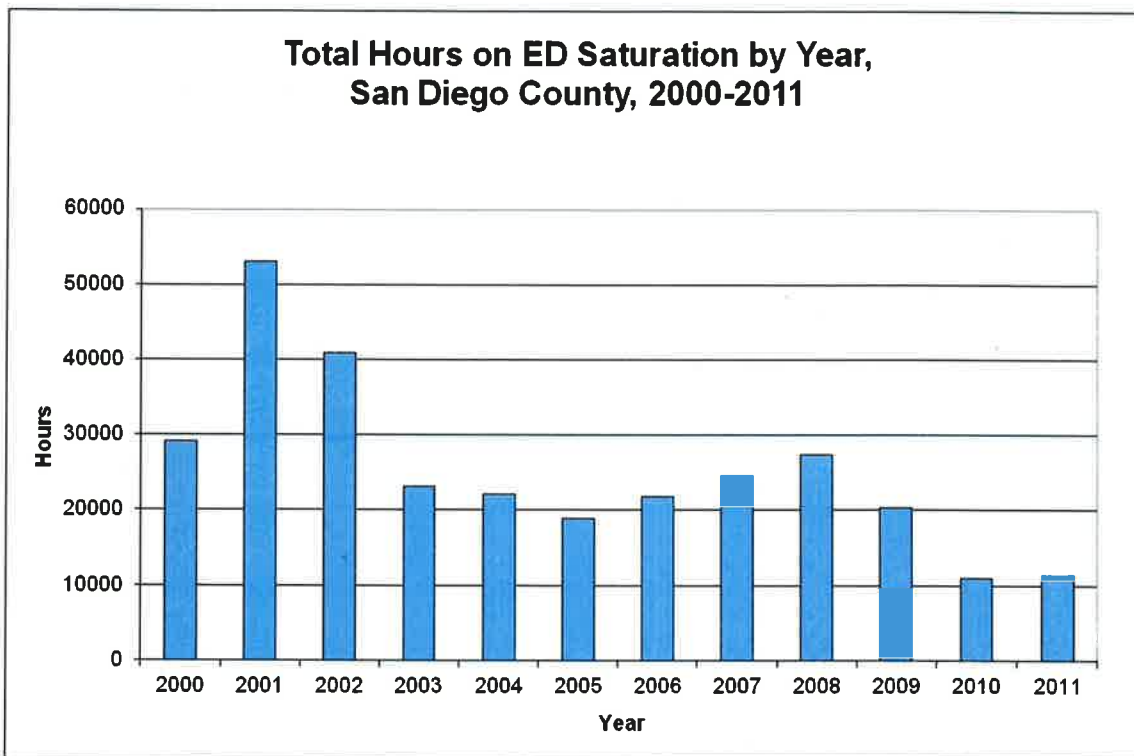
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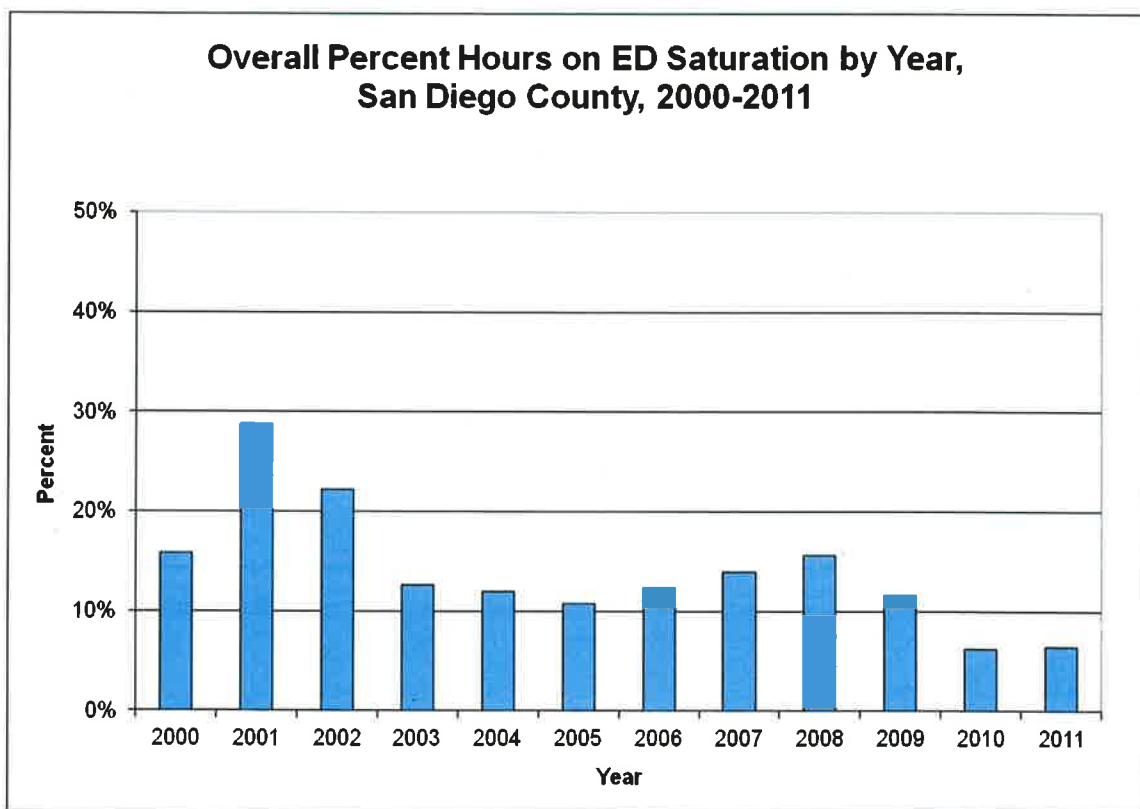
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Medical Director's Update for Base Station Physicians' Committee June, 2012

The Sidewalk CPR effort to teach 2012 people hands only CPR was a success! A total of 3,048 people received the brief instruction and chance to practice the skill. Participants were involved and appreciated the information. A thank you is much deserved by all the sponsoring agencies where volunteers took the time to participate. Increasing the number of sudden death victims who receive bystander CPR will increase survival rates. Even the brief demonstration and skill practice should give potential rescuers the confidence to perform CPR in an emergency. At our EMS site we also gave a brief familiarity with the AED, including asking if they knew the location of their AED and how to use it. Many persons had seen or worked with one before.

At the same time as Sidewalk CPR, San Diego Project Heartbeat announced the 100th save from their community layperson AED program. Project Heartbeat has reason to be proud. On a personal note, I remember writing the first California AED approving legislation in the late 1980s, relying on dispersion through the community by laypersons. The administration and a legislator carried the bill which was very simple and took effect in 1988.

Again, thanks to all the volunteers who made Sidewalk CPR a success.

Please remember to obtain field 12-leads early after patient contact. The sooner a positive EKG is transmitted the sooner the hospital can activate the cardiac catheterization laboratory. The primary value of the EKG is identifying STEMI. The Base Hospital Nurse Coordinators believe this will contribute to patient care and shorten door-to-balloon times. Thanks for your cooperation.

The Beacon EMS Hub project continues to work on implementation of patient care record transfers, including 12-leads.

The Golden Guardian drill on May 16, 2012 gave the county a chance to test systems for disaster response using different scenarios. A major focus was receiving patients from surrounding counties where the health system suffered major disruption. A large number of organizations took part in the medical portion of the drill.

The Centers for Disease Control and Prevention confirmed what we already knew: this year's influenza season was the lightest in a number of years. Details are available at the CDC website
http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6122a4.htm?s_cid=mm6122a4_w.

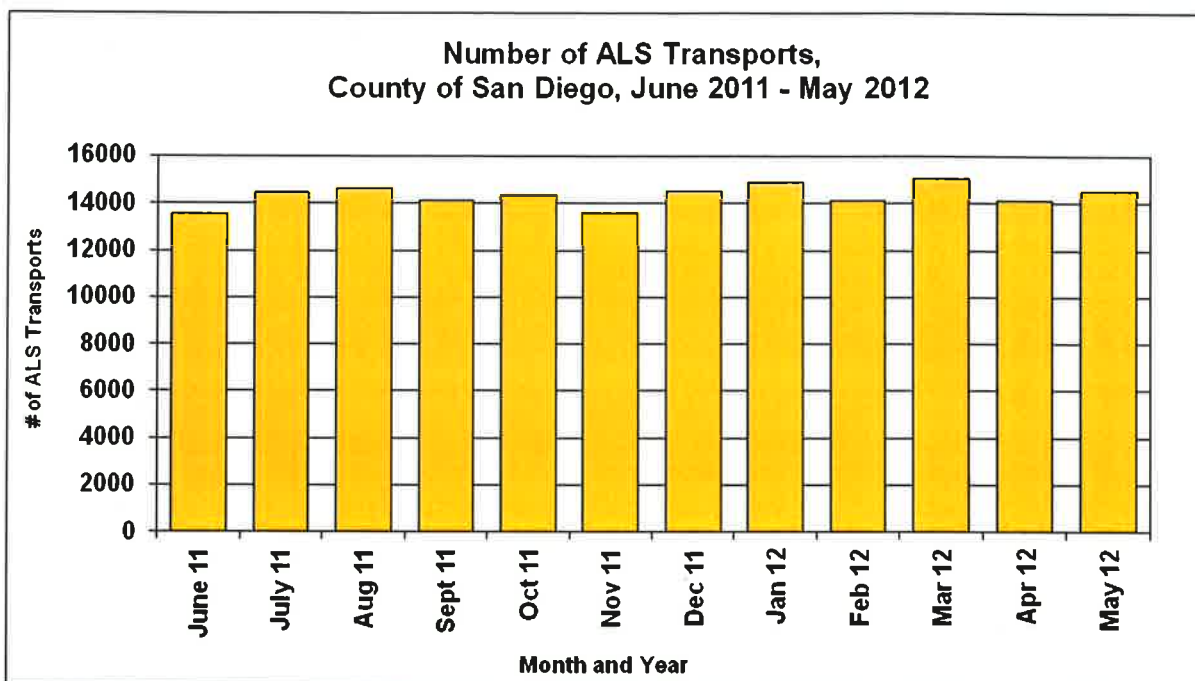
The Postal Plan is designed to deliver antibiotics to the public potentially exposed to an agent such as anthrax. The program is aimed at specified zip codes. It is one tool if large scale prophylaxis is needed. A recent drill tested the Plan with excellent results.

Prehospital agencies are encountering more patients with ventricular assist devices, LVAD or VAD devices. This year's update of the protocols addresses this issue. We will look at this more in the coming year, as devices and technology change.

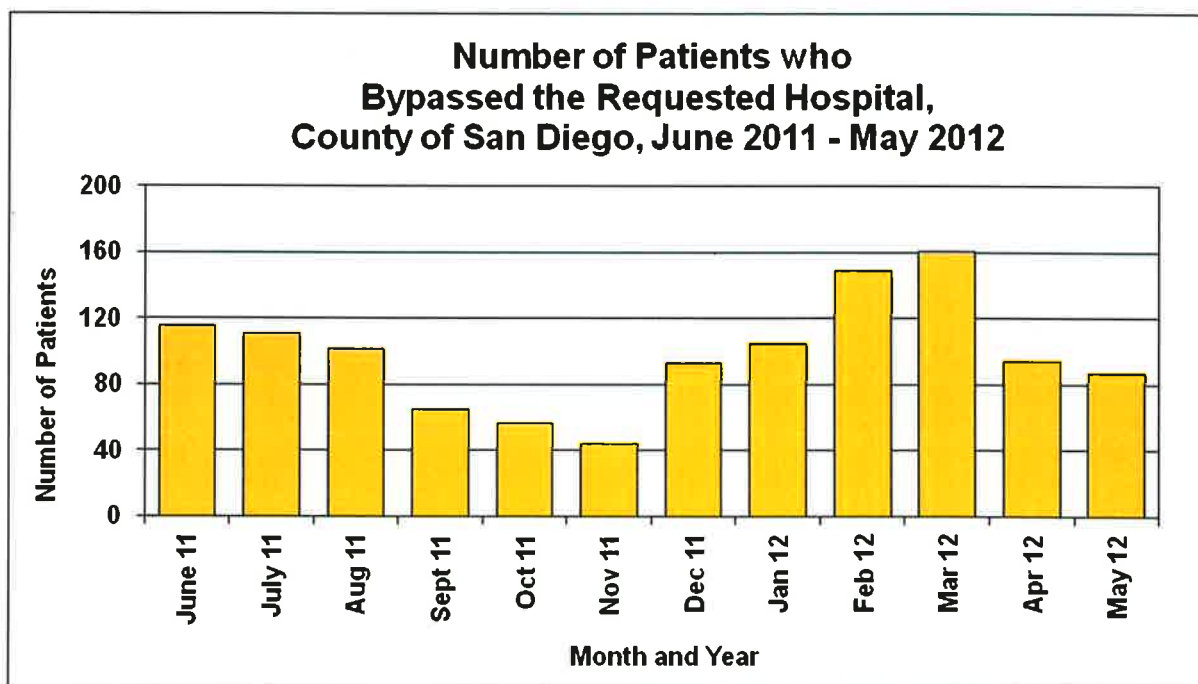
The state continues releasing or readying for release numerous revised or new regulations. These include proposed changes to the EMT, AEMT, and paramedic regulations. The proposed paramedic regulations included changes in interfacility transport, such as training and scope of practice. Proposed new regulations aimed at STEMI and stroke systems are near release, while other proposed regulations under consideration concern EMS systems and EMS for Children systems.

The Joint Commission released criteria for identification as a comprehensive stroke center. These centers will have a variety of imaging for stroke, and volume requirements for treatment of different types of strokes. We will evaluate the new category and see how it fits in our current stroke care system.

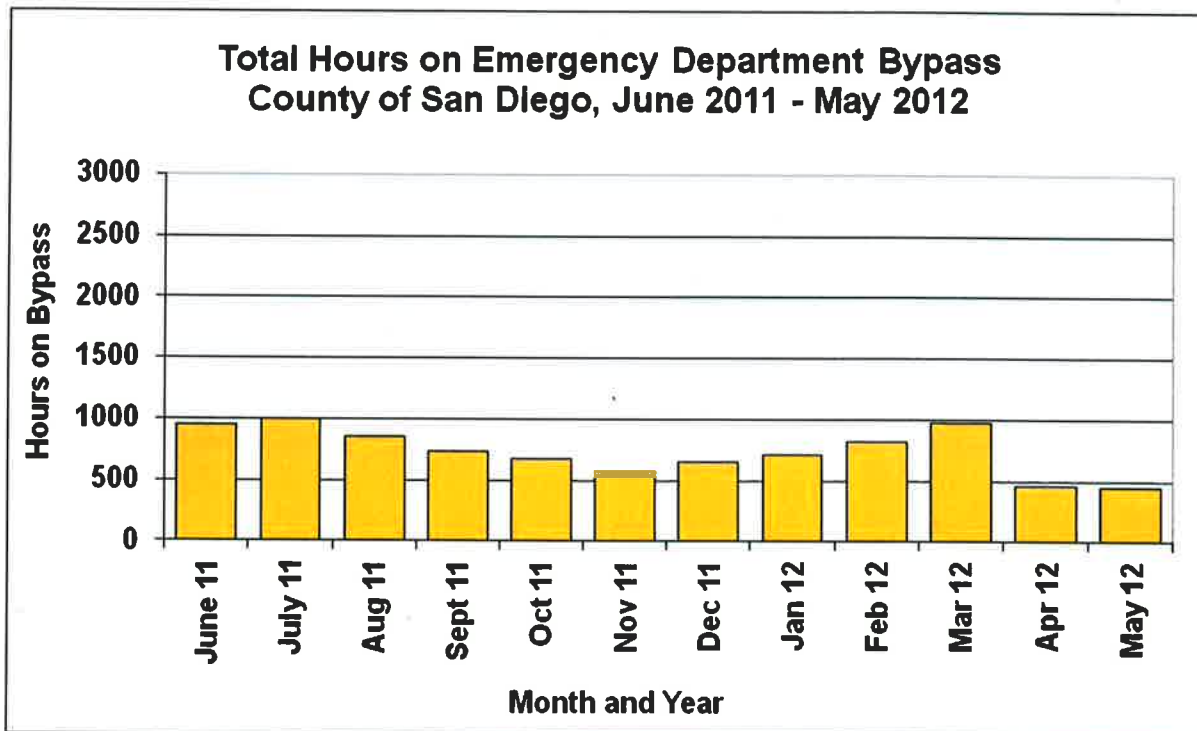
The Emergency Nurses Association national meeting is here in San Diego in September. Anyone interested in being an "ambassador" to help with guests can get free admission to the opening and closing receptions and the exhibits. If interested, contact Susan Smith, R.N., at EMS.



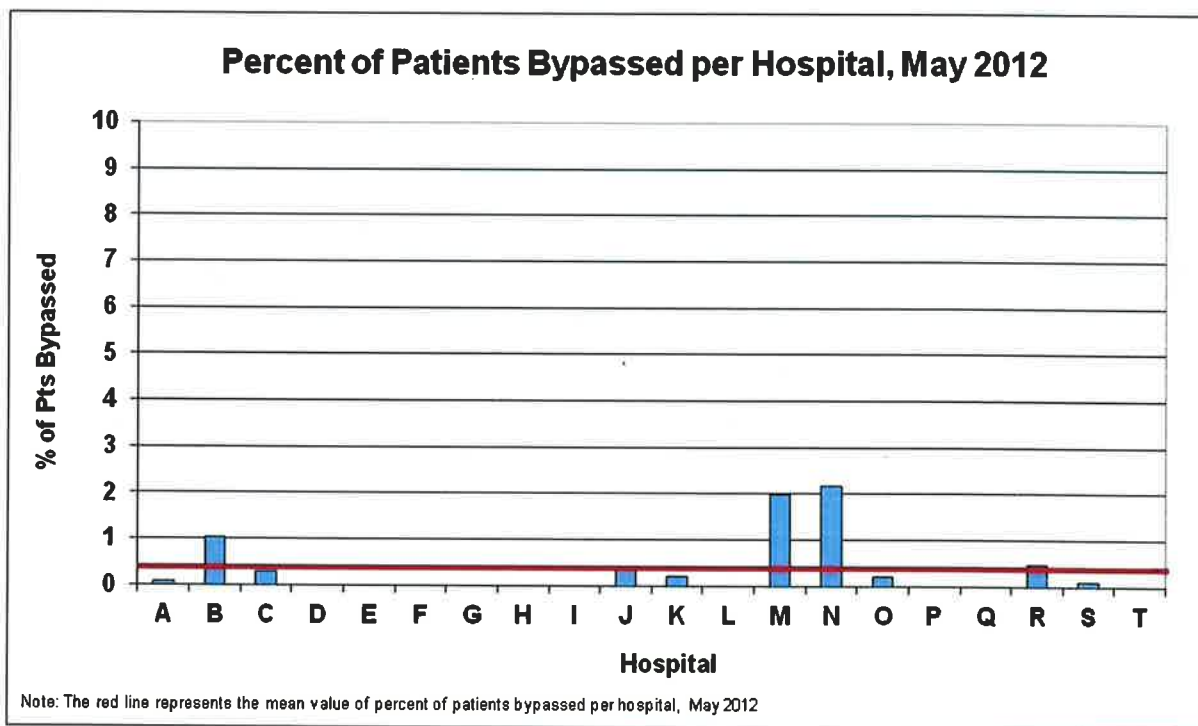
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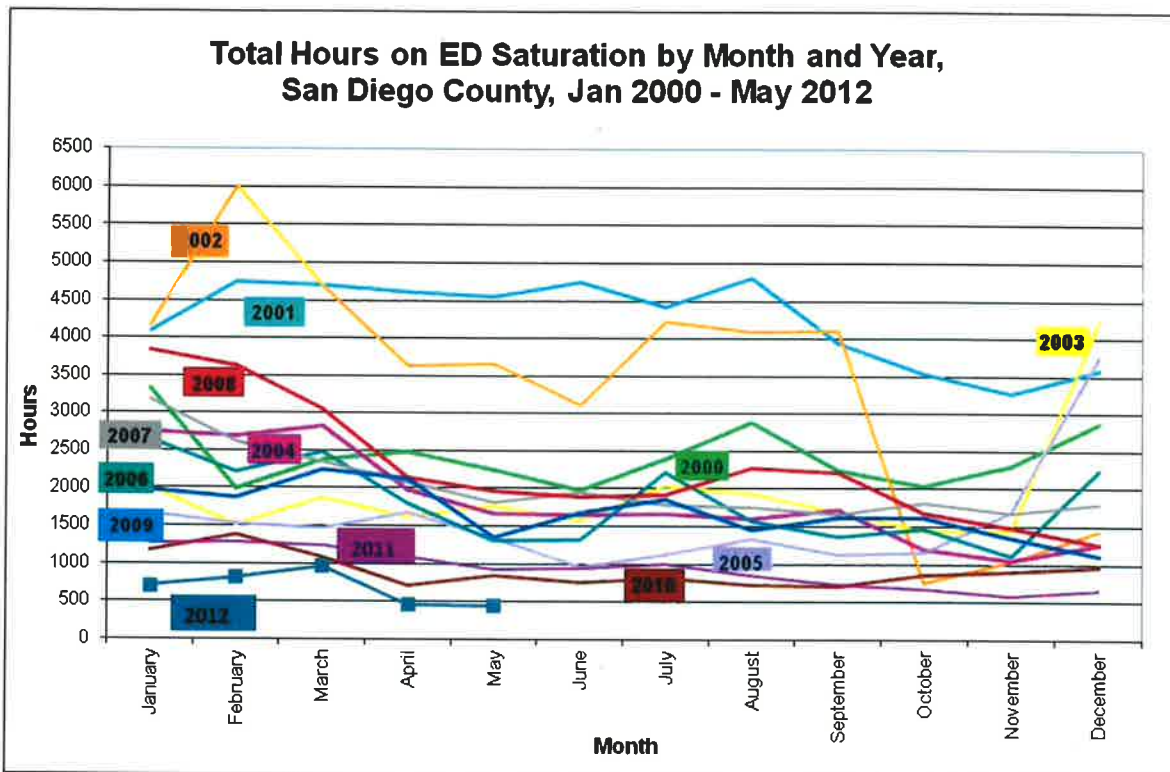
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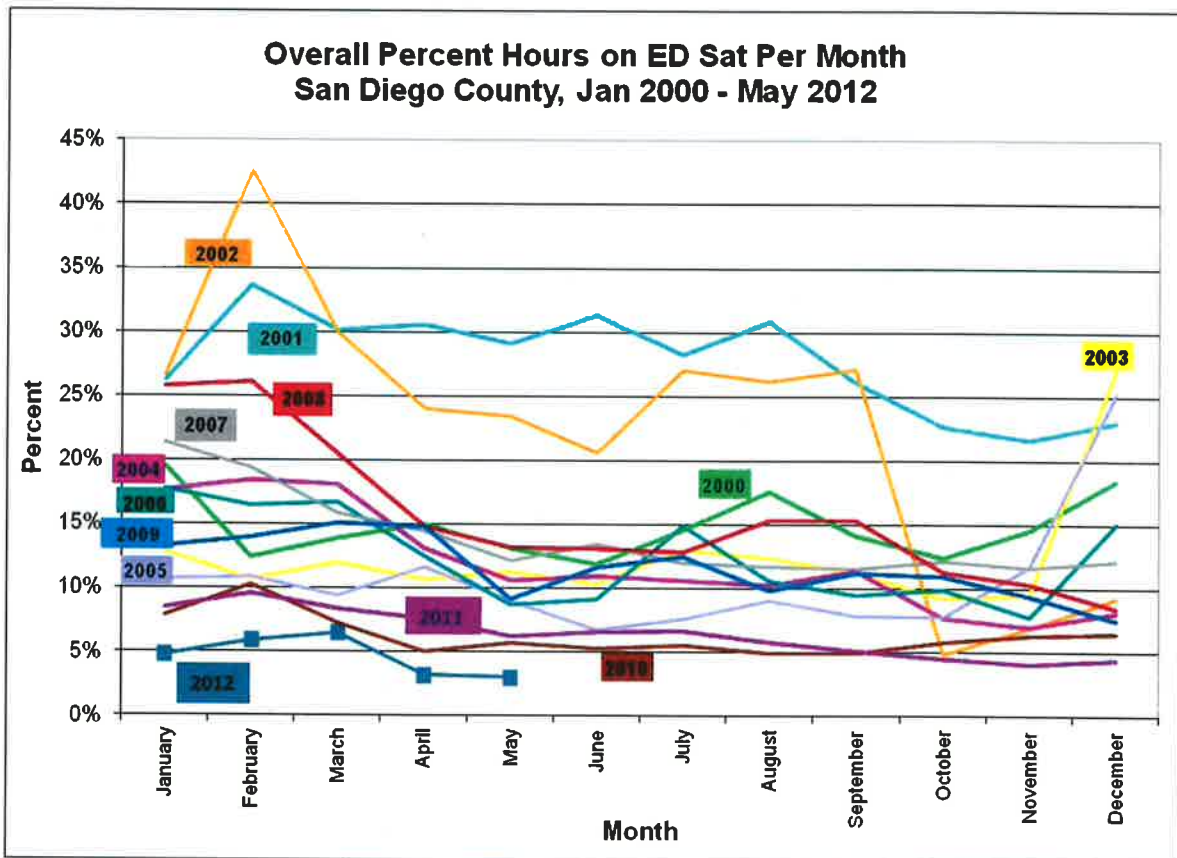
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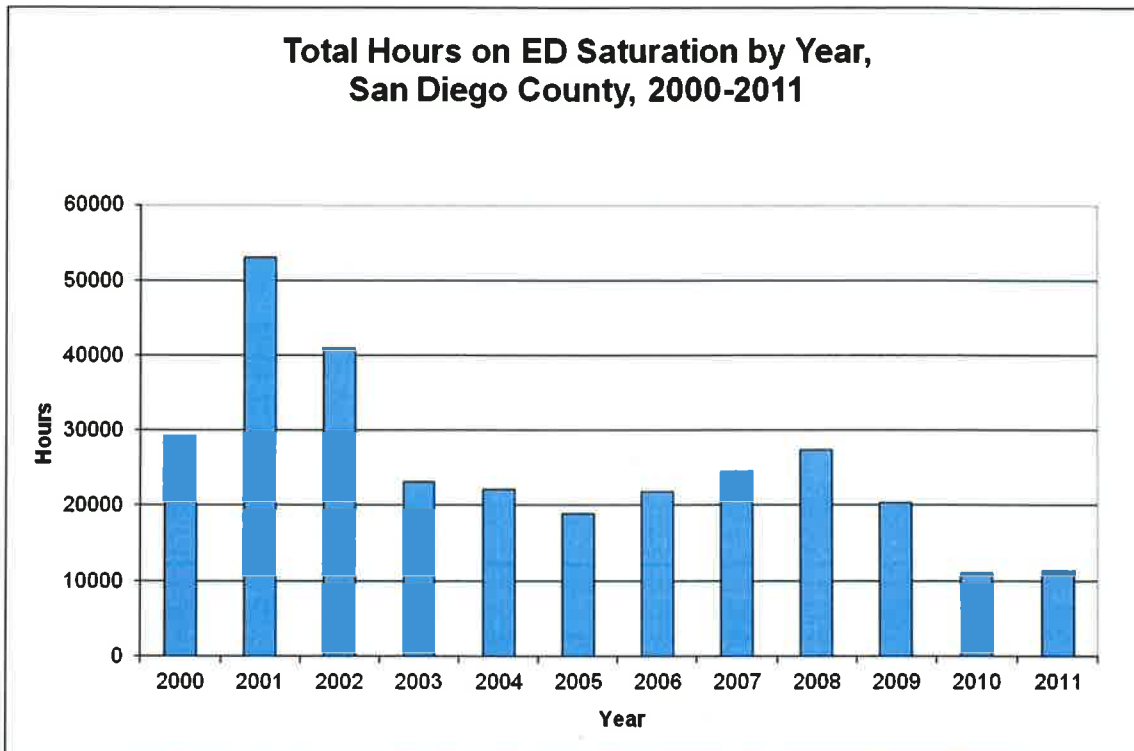
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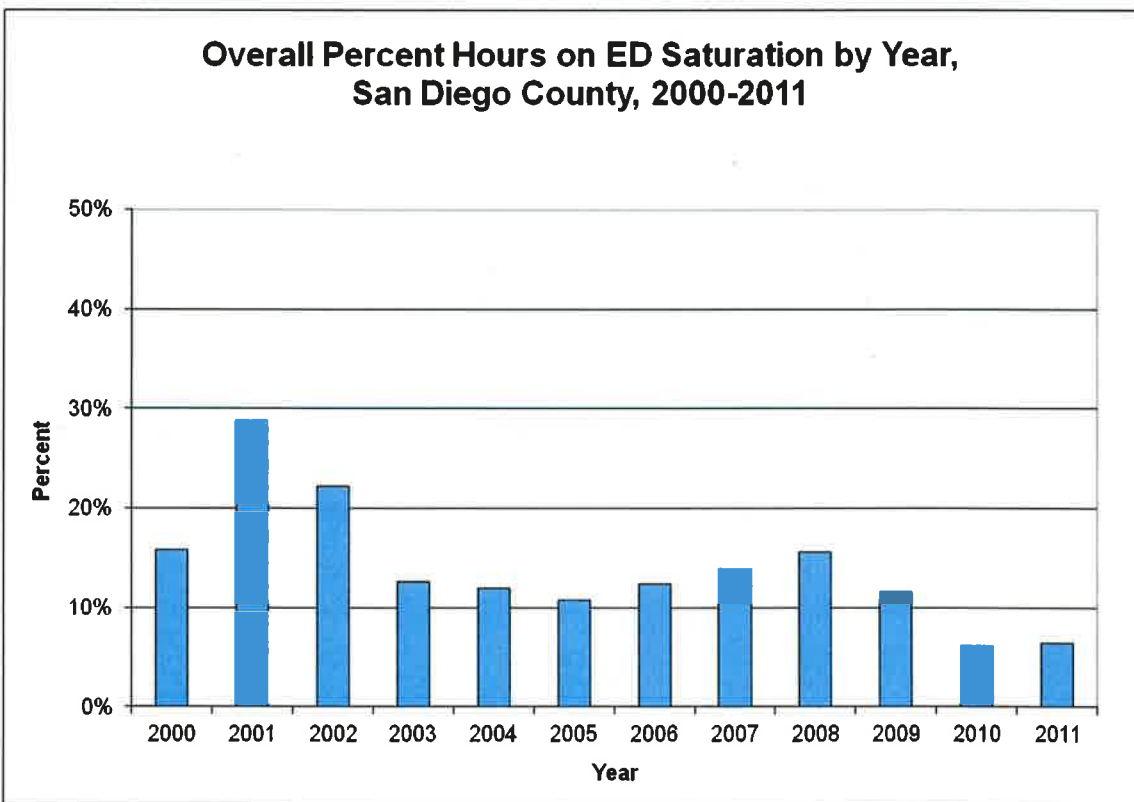
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Medical Director's Update for Base Station Physicians' Committee July, 2012

This year's protocol review will occur in the fall. If you have suggestions for protocol changes, please let us know at EMS.

Instructions were sent out for dilution of epinephrine 1:1000 to the concentration of epinephrine 1:10,000. There may be a shortage of 1:10,000 prefills, forcing the dilution of epinephrine for cardiac arrest. After the dilution is performed have another crew member confirm the concentration. Do not save the solution or prepare it in advance. If epinephrine 1:10,000 is to be used for IV administration in anaphylaxis, the base MICN should confirm the correct dilution and the correct dose in mL and milligrams.

IQCS training continues in an effort to find and correct all bugs in the system. We are hoping for an August start as work continues.

Please obtain field 12-leads early after patient contact when indicated. The sooner a positive EKG is identified and transmitted, the sooner the hospital can activate the cardiac catheterization laboratory. The Base Hospital Nurse Coordinators believe this will contribute to improved patient care and shorten door-to-balloon times. Thanks for your help.

EMS continues to meet with the Beacon staff to implement the flow of patient records. This will include field 12-leads.

Summer temperatures are up and EMS began its heat monitoring for the season. Remember to consider heat injury in patients. Also, if it comes up, encourage neighbors to check on the elderly or others prone to heat illness, and make sure they know about the availability of cooling centers.

The state has convened a working group to look at the issue of Community Paramedicine. In these programs paramedics perform in roles apart from the usual 911 response to emergencies. Functions differ in different areas around the country, but may focus on minor trauma or outpatient care, disease management such as congestive heart failure, diabetes,

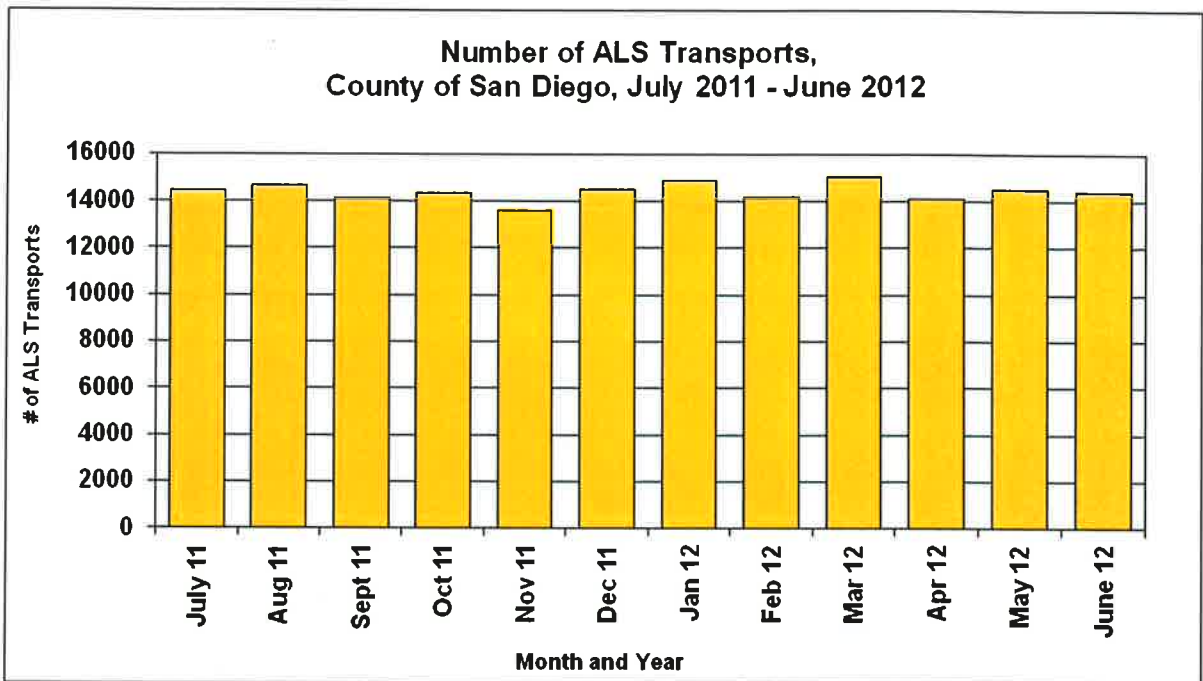
etc, or management of frequent users as we have seen here in San Diego. The review will look at possible roles, the experience elsewhere and implementation issues for California.

We are still waiting for the substantial number of state regulations we expect from state EMSA in the near future. The paramedic regulations were reviewed again and likely will go out for another 15 day comment period. The focus recently is on a limited scope of practice for interfacility transfers for all medics under the optional scope of practice, with a more comprehensive scope and training for those elect the more substantial IFT training which will run about 200 hours.

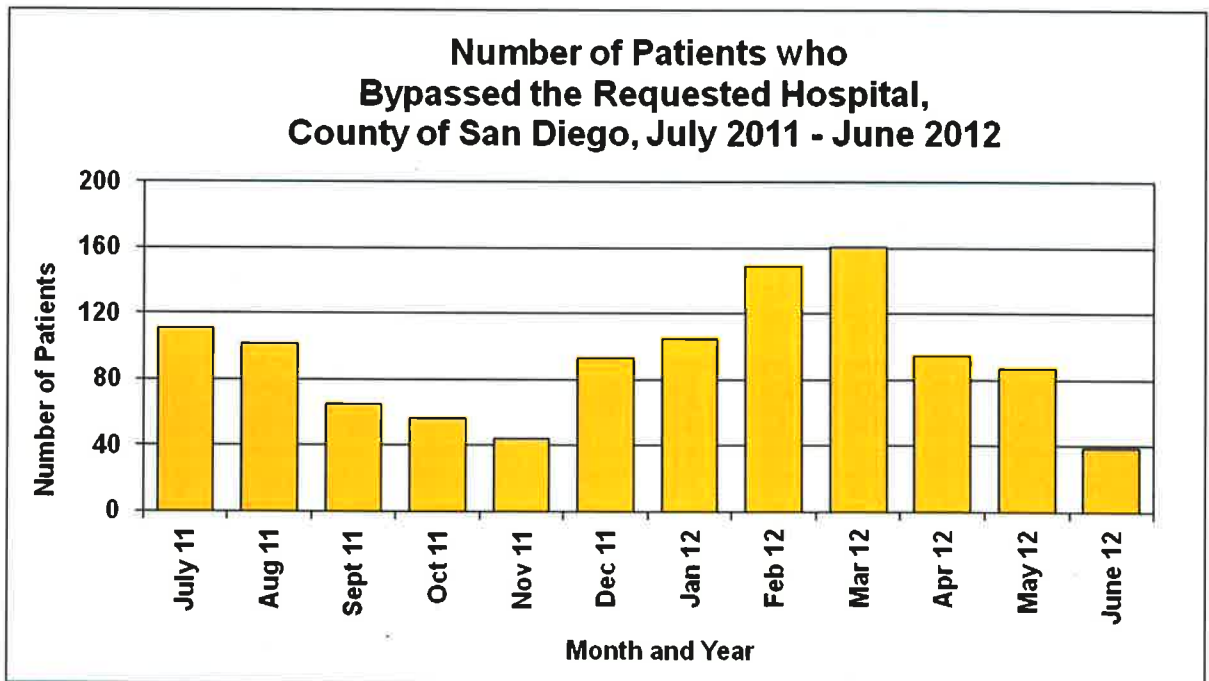
We expect regulations released also on EMS for Children, STEMI, and stroke systems implementation.

The VA has started a Homeless Veterans Initiative to prevent and end homelessness among veterans. If in the course of patient care you recognize they may need more than medical help, you may ask if they are a veteran. If so, you can give them materials that have the VA telephone number to seek assistance. For questions, email VAHomeless_Veteran_Outreach@va.gov. Materials can be obtained at www.va.gov/homeless/materials_center.asp#giveaway.

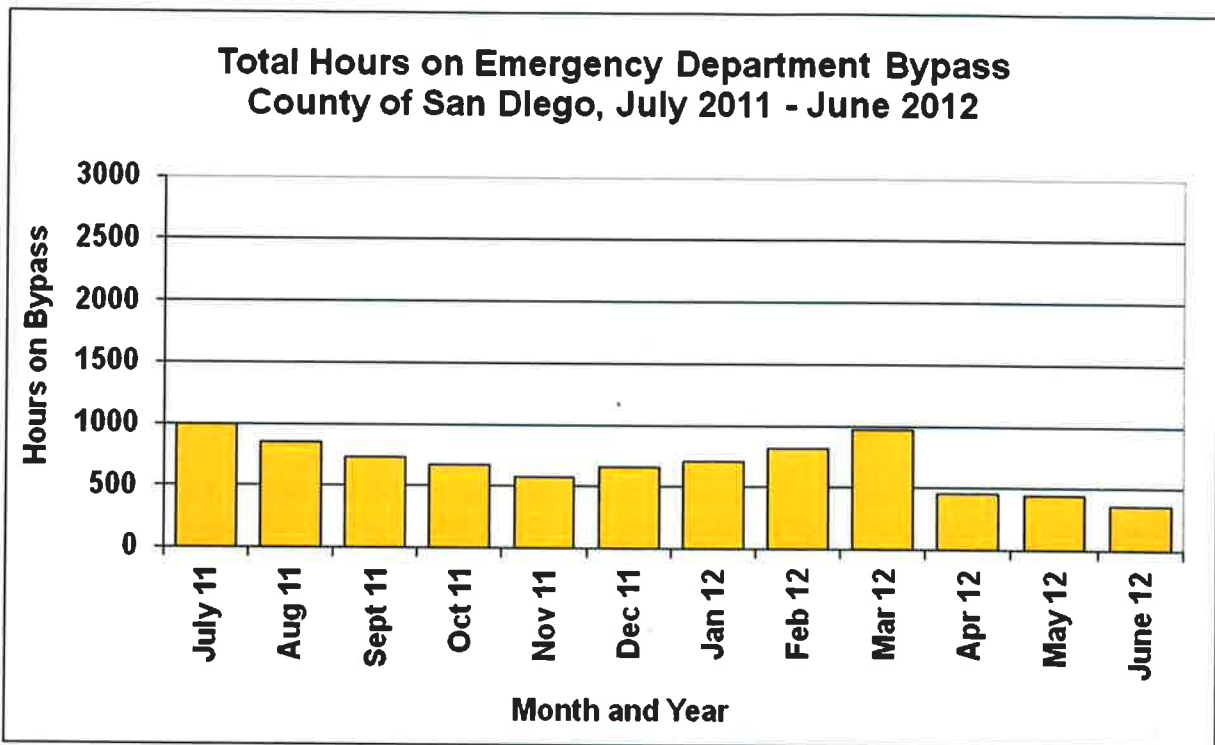
A recent audit revealed we could improve use of charcoal. We have two criteria in our treatment guideline for charcoal use: ingestion within one hour, and recommended by the poison center. The one hour interval had high compliance. On the other hand, fewer contacts of the Poison center were made when charcoal was given.



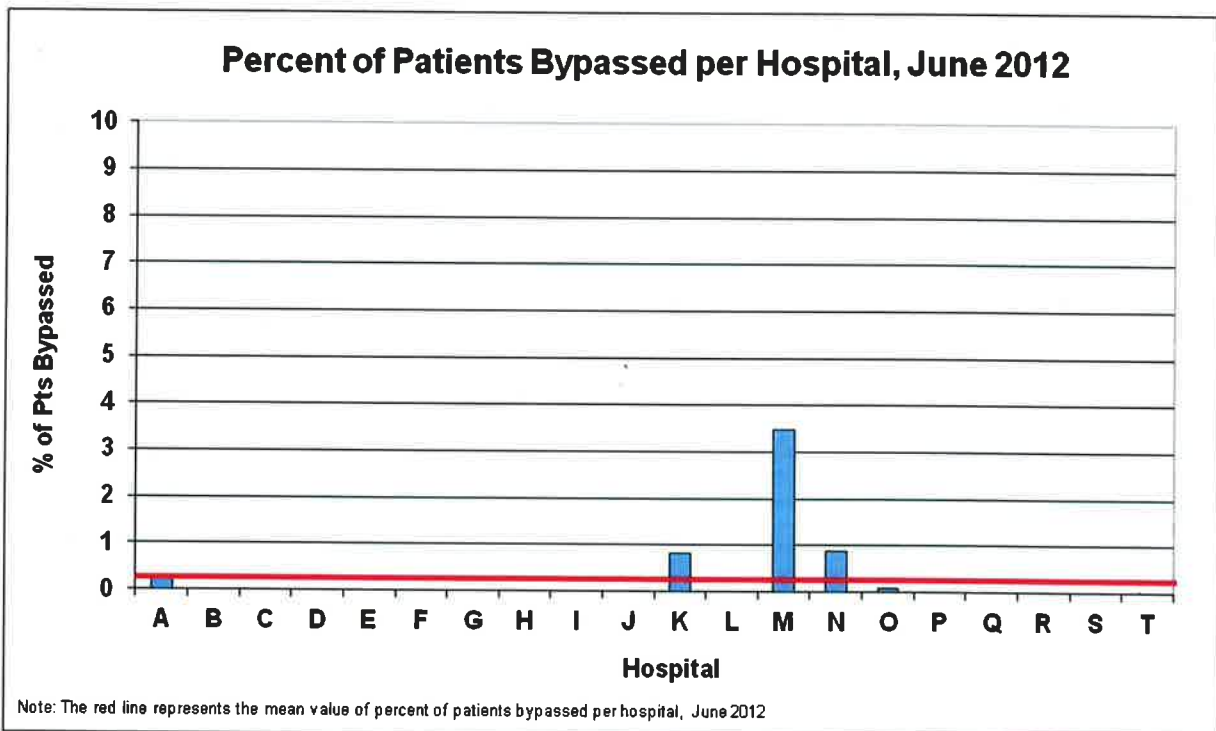
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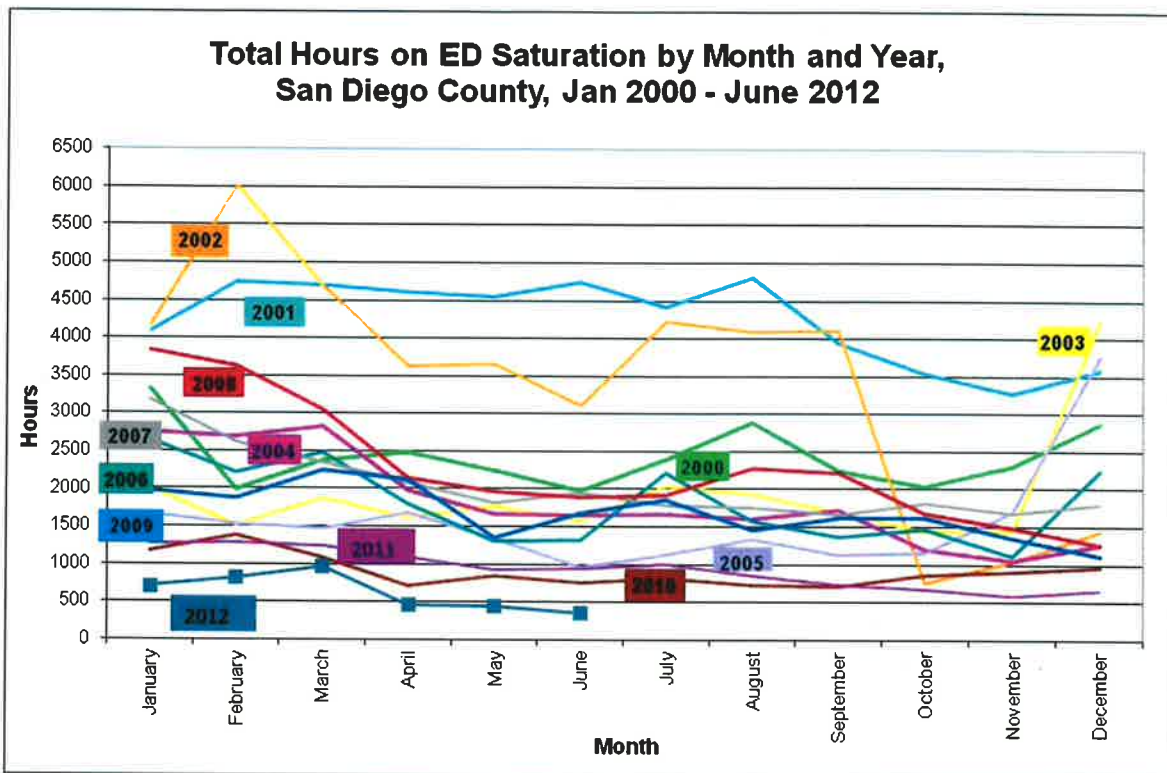
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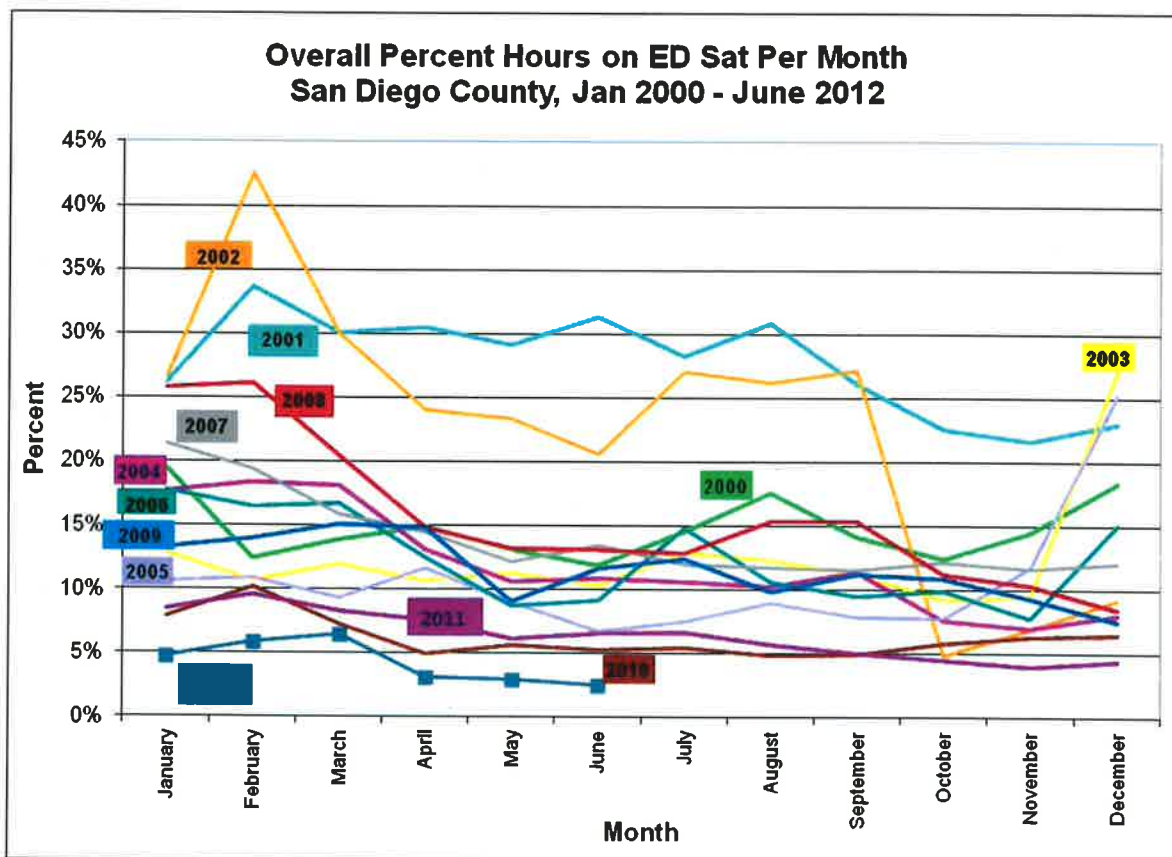
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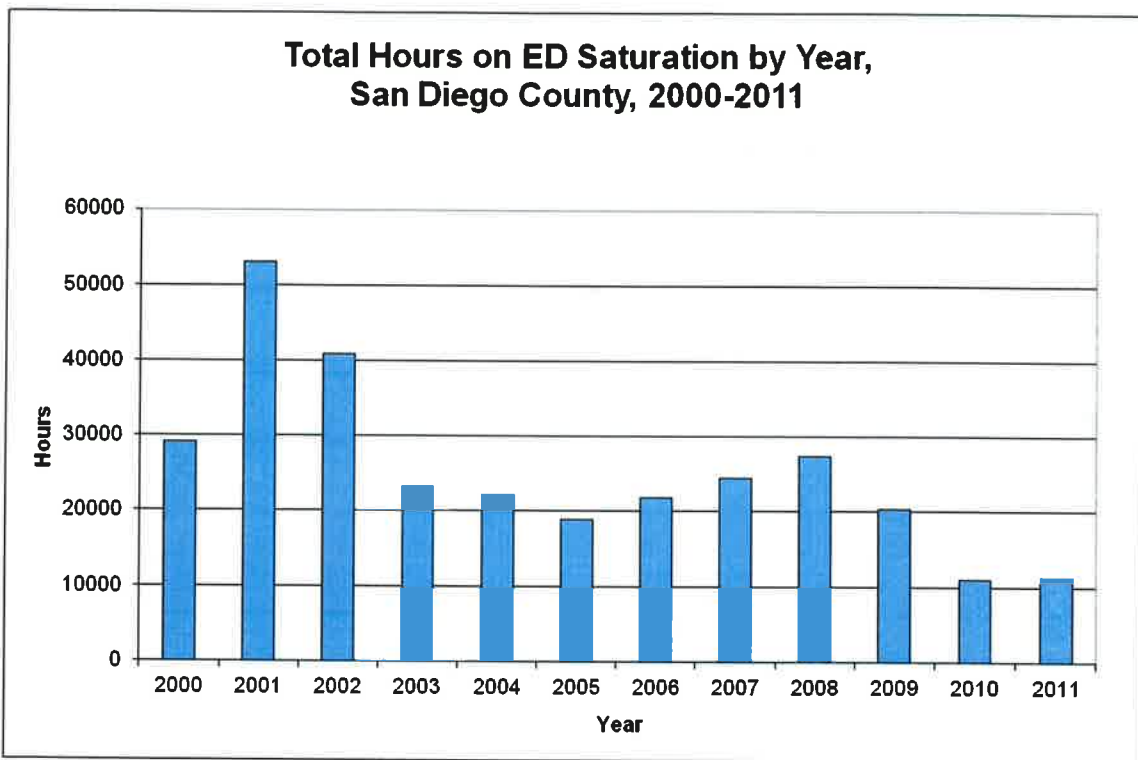
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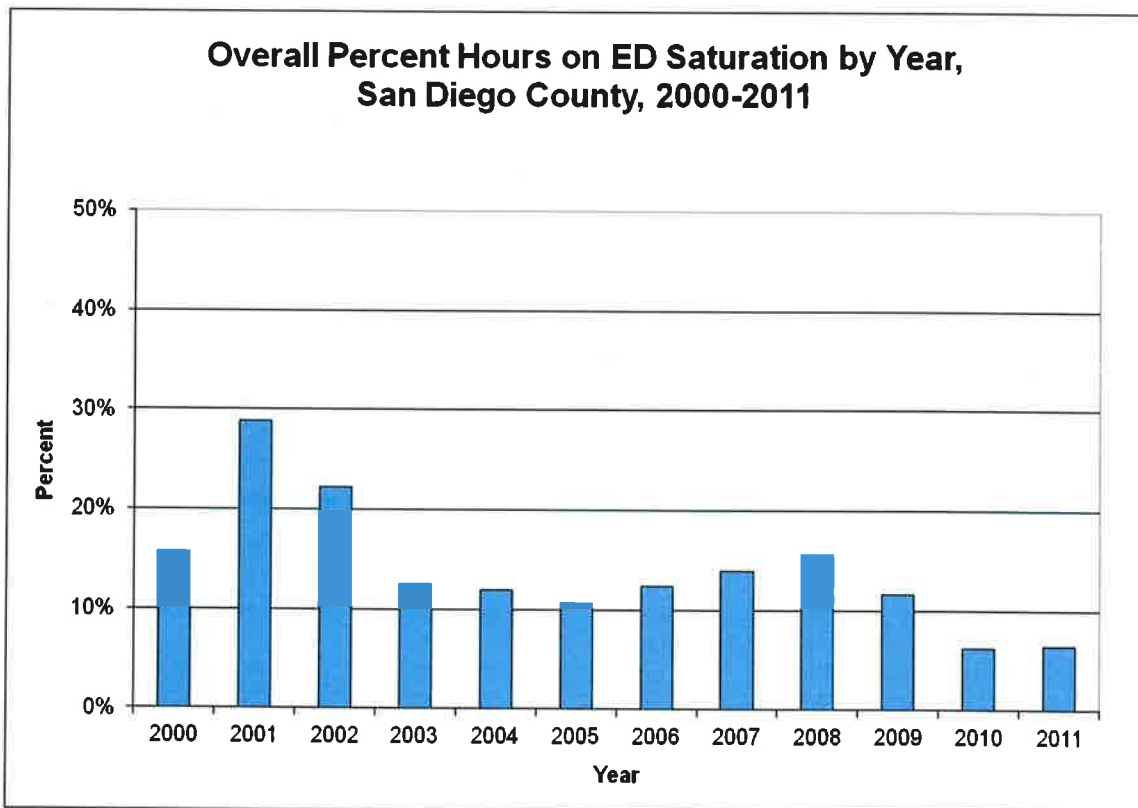
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Medical Director's Update for Base Station Physicians' Committee September, 2012

Congratulations to Jim Dunford. He received the CAL/ACEP EMS Achievement Award at the spring Scientific Assembly. This honor reflects Jim's achievements and contributions, not only here in San Diego, but nationwide. CAL/ACEP is the California chapter of the American College of Emergency Physicians. The award was presented at the President's Gala. A richly deserved award.

Good medical care protects patient privacy. This was always true, but more complicated after HIPAA. Recently, EMS personnel took photographs of an ED tracking board, compromising patient privacy. This was done for fun, and not malicious, but still caused a significant problem for the hospital. Remember—no photographs of patients or identifying information. Thanks for your help with this.

Stroke questions help make important, time-dependent decisions about stroke care. Asking three questions in the field will help expedite patient care. One, get the time of onset of the stroke symptoms. This time is when symptoms were first noticed. Second, get the last time the patient was normal. If the patient was asleep it is not when they awoke, but earlier. Third, bring a witness or companion of the patient to the hospital if they can provide the pertinent history especially to answer questions about the onset, times, etc. If the companion cannot go to the hospital, get a telephone number so the hospital staff can communicate with them.

Influenza vaccine is available. The recommendation for vaccination is now any person 6 months of age or older. Immunization of EMS personnel is particularly important. EMS workers are healthcare workers who are in contact with patients who may be weakened or debilitated. Healthcare workers may infect other persons before the healthcare worker is really symptomatic or ill.

Vaccination also helps prevent illness at a time of year when staffing is difficult. Vaccination helps prevent serious or life-threatening complications of influenza. It helps prevent transmission to family members. Influenza vaccine is safe. Influenza vaccination of persons

with a history of egg allergy is changing. Persons who experienced only hives after exposure to eggs should receive influenza vaccine, with some additional safety measures, including 30 minutes of observation after vaccination. Those who report egg reactions with symptoms/signs of angioedema or anaphylaxis should be referred to an appropriate physician for further risk assessment.

The San Diego Emergency Care Summit 2012 will be held October 25th. Registration information is available. The Summit will include a presentation by a physician from Joplin, review this year's emergency department experience, a prehospital panel, pediatric and burn surge, narcotic prescribing, psychiatric holds, and licensing updates.

Remember, there is no psychiatric bypass category in our destinations and on the QA Net.

Palomar Hospital moved into its new Palomar Medical Center facility. The move was smooth after much planning. An urgent care is at the Palomar Downtown campus (the old facility), along with labor and delivery, pediatrics and behavioral health services.

The 2010 Trauma Report is now available on the EMS website. The report includes extensive information on the system and patients.

This year's statewide drill will have an earthquake scenario. It will take place on November 15, and this year, occur on the evening shift for hospitals from 7 pm to 11 pm.

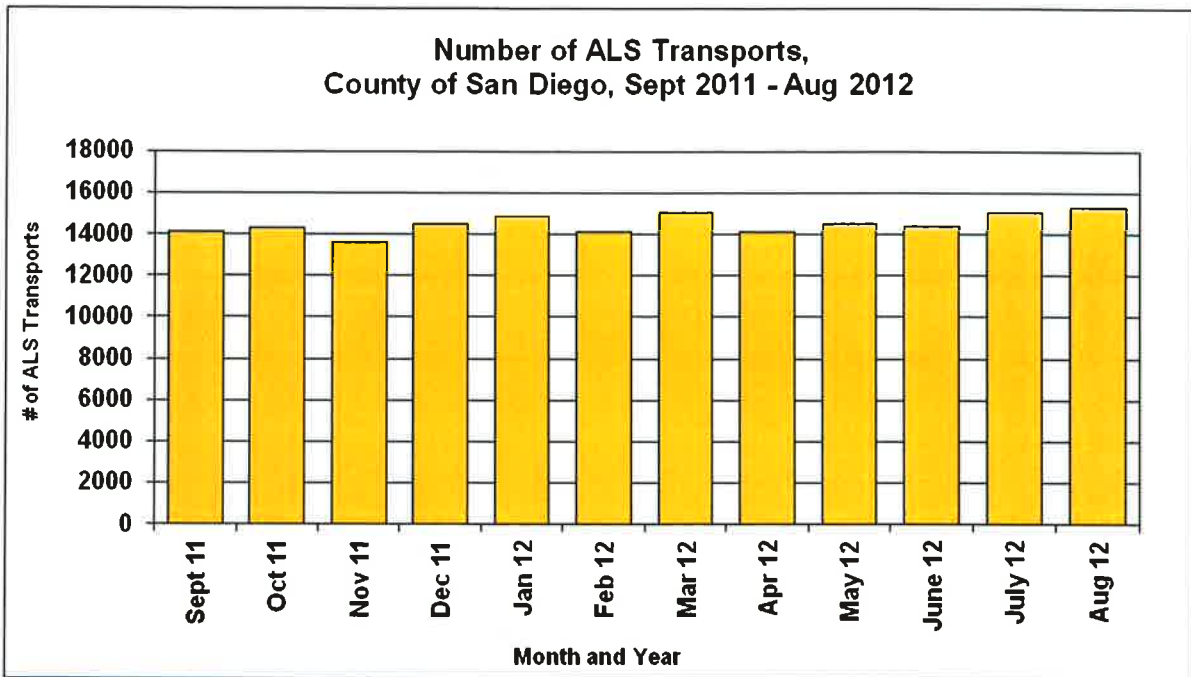
This year will be the protocol review year. If you have suggestions for changes let us know.

The Joint Commission has certified Primary Stroke Centers for some time, and is now developing Comprehensive Stroke Centers. These hospitals would have ability to perform invasive procedures such as intra arterial thrombolysis and clot extraction. These hospitals would have additional personnel requirements. The integration of these facilities into our stroke system will be part of the development of the stroke system under new state regulations expected in the near future.

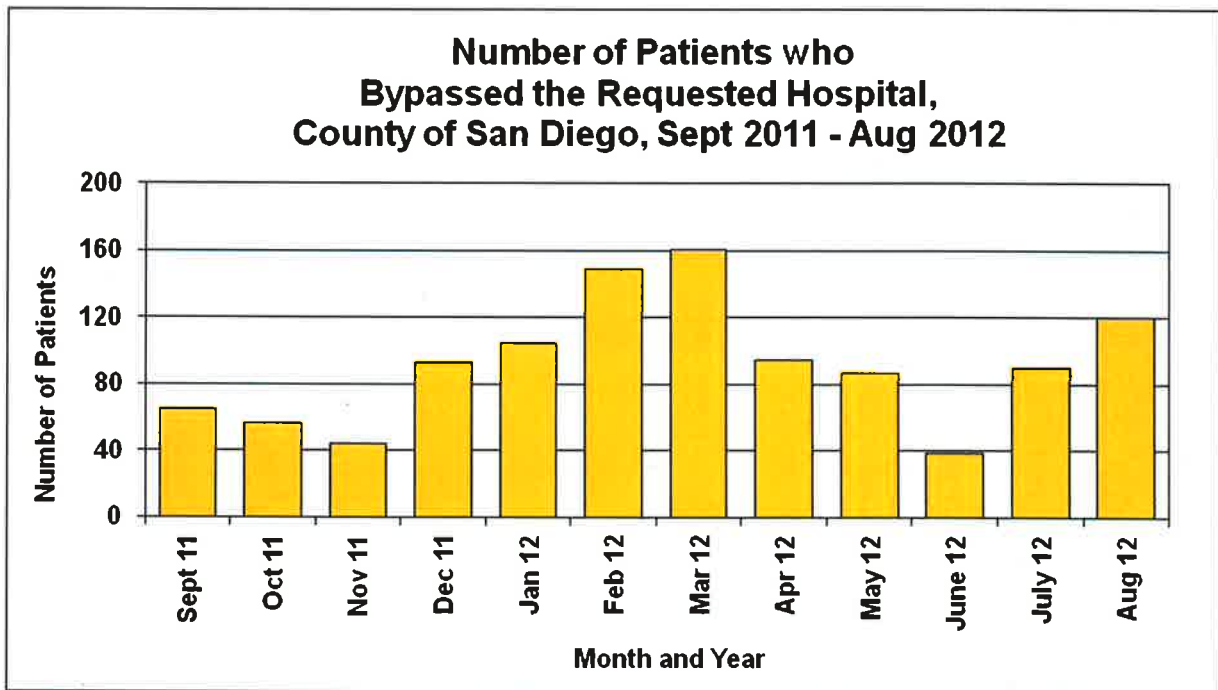
The state released the anticipated EMS for Children regulations. These would define 4 levels of receiving hospitals, along with data collection requirements, personnel requirements, quality improvement standards and other features. Comments are due October 2.

iQCS training is underway.

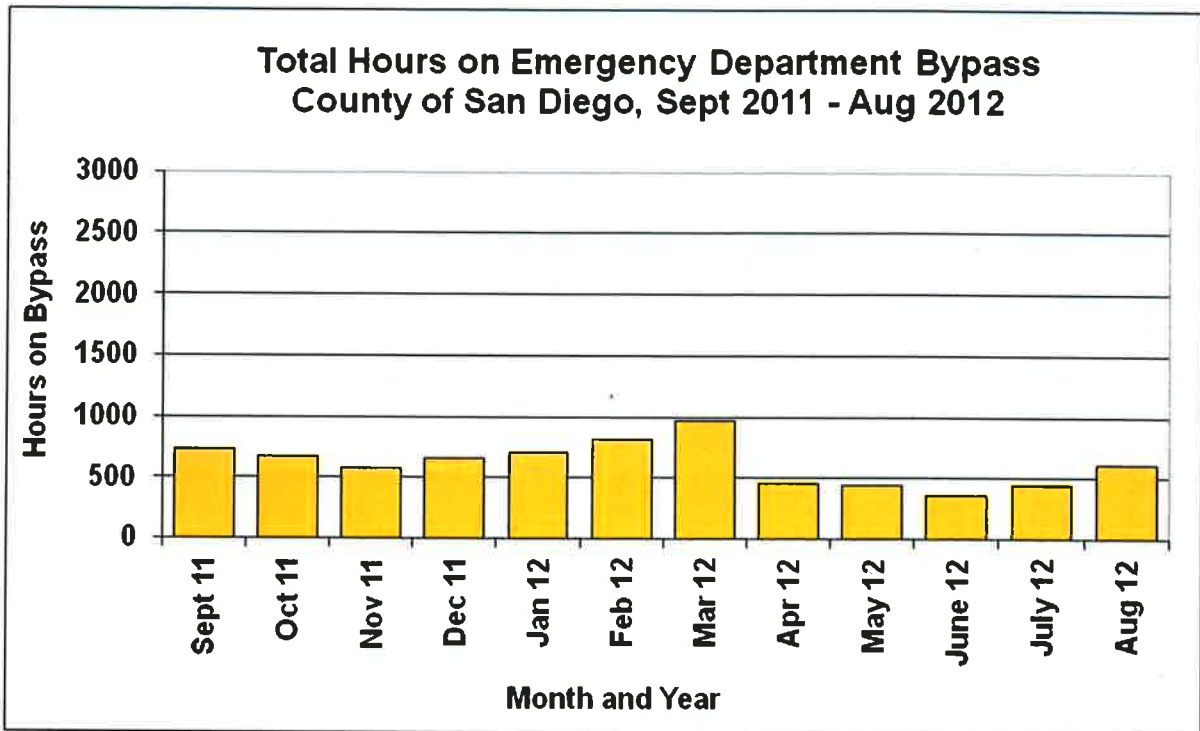
CAHAN underwent an update that required users to change their password. We encourage anyone on CAHAN to do so, so they can continue to receive messages.



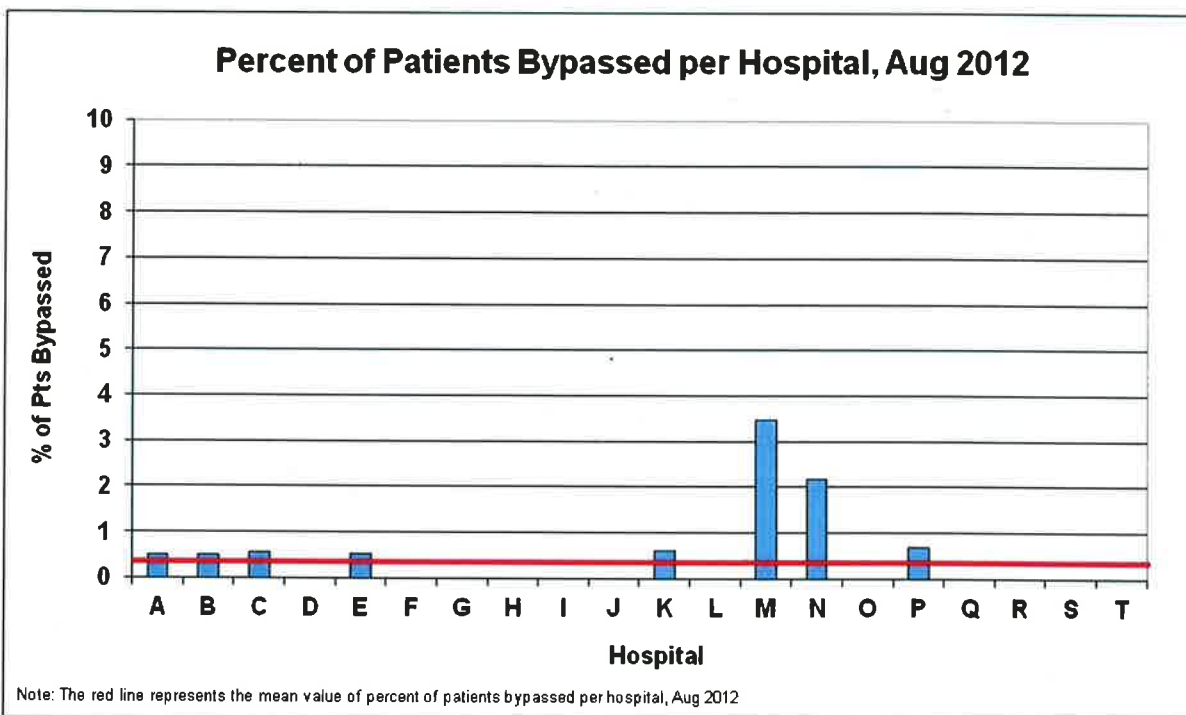
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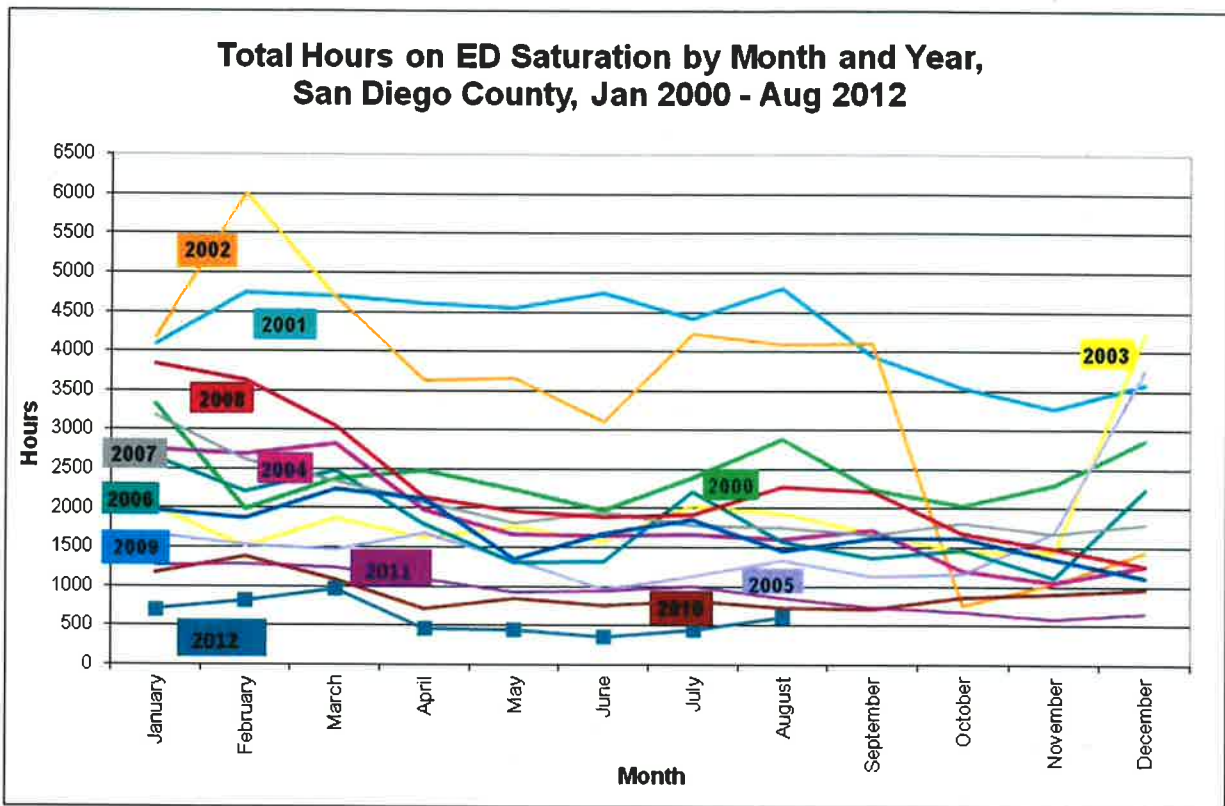
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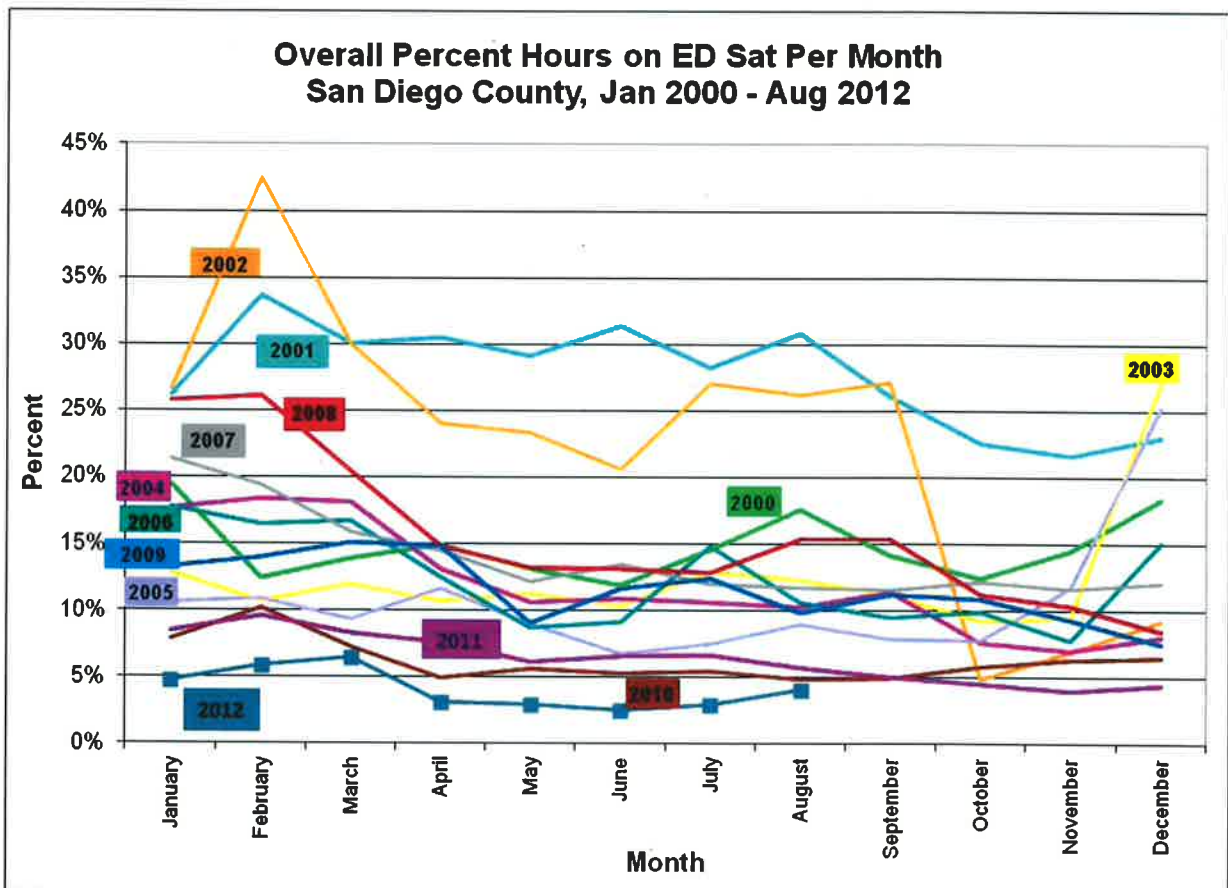
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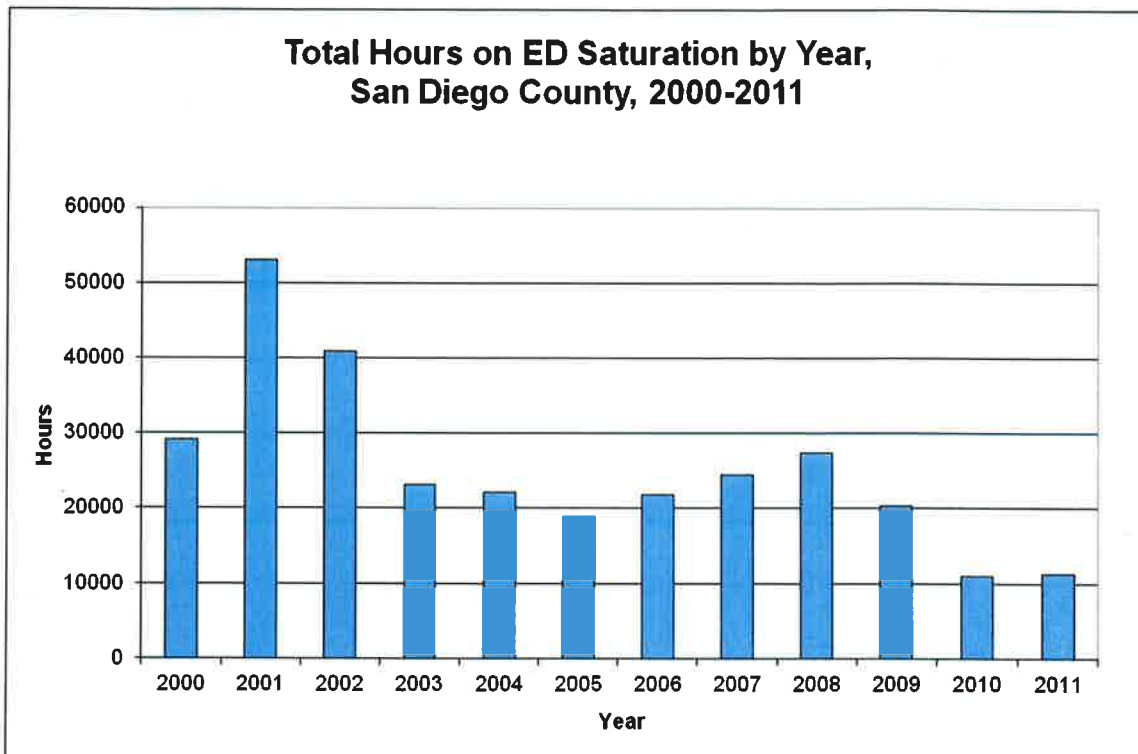
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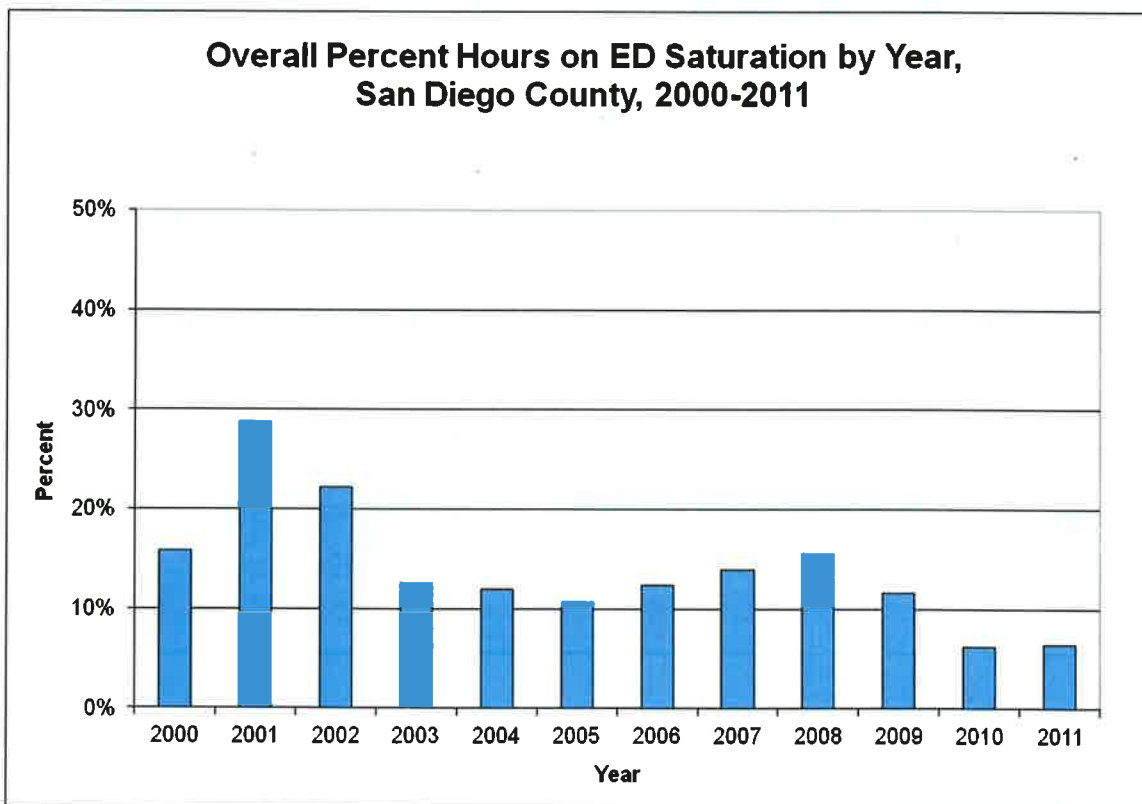
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